CONSTRUCTION NEWS

Some of the Week's Large Projects

AMONG the announcements for the current week are the following:

Proposed Work

Automobile plant, Pontiac, Mich., General Motors Corp. having plans prepared, $5,000,000.

Street work, Los Angeles, Calif., plans widening 6 mi. Santa Barbara Ave. and 5 mi. Exposition Blvd., total $4,500,000.

Store, San Diego, Calif., Holzwassers, Inc., plans building, $3,000,000.

Hotel, New York, N. Y., I. Chanin having plans prepared, $3,000,000.

Apartment, Chicago, Ill., R. S. De Goyler having plans prepared, $2,500,000.

Plant, Somerville, Mass., First National Stores, Inc. having plans prepared, $2,000,000.

Breakwater, Santa Monica, Calif. plans bond election, $2,000,000.

Apartment, New York, N. Y., Lexington-50th St. Corp. having plans prepared, $2,000,000.

Building, New York, N. Y., Solomon & Kahn having plans prepared, $2,000,000.

Hotel, Chicago, Ill., W. C. Bannerman & Co. having plans prepared, $1,600,000.

Theatre, San Antonio, Tex., Interstate Amusement Co. plans building, $1,500,000.

Office and store, Lincoln, Neb., Realty Syndicate having plans prepared, $1,200,000.

Sewers, St. Joseph, Mo., plans bond election, July 14, $1,036,000.

Hotel, Boston, Mass., Paul Revere Hotel Corp. having revised plans prepared, $1,000,000.

Church and office, Ft. Worth, Tex., First Methodist Congregation plans 16 story building, $1,000,000.

Bridge, Louisana, Mo., Missouri-Illinois Bridge Co. making plans for bridge, $1,000,000.

Market, Indianapolis, Ind., City plans building, $1,000,000.

Theatre, Sioux City, Iowa, Orpheum Circuit, Inc. having preliminary plans prepared, $1,000,000.

Sugar Factory, Petrolia, Ont., Peninsula Sugar Co. having plans prepared, $1,000,000.

Bids Wanted

School, Indianapolis, Ind., June 29 by Catholic High School, $1,000,000.

Club House and auditorium, Cleveland, O., Aug. 2. Sperry Realty and Investment Co., $1,000,000.

Road work, Nebraska, July 1, by R. L. Cochran, highway engr. 45 projects, $1,000,000.

Contracts

Hospital, Newark N. J., Beth Irael Hospital to Starrett Bros., $2,000,000.

Office, Oklahoma City, Okla., R. Perrine to Manhattan Constr. Co., $1,600,000.

Club and Hotel, San Francisco, Calif., Club Farallon to Lindgren-Swinerton, Inc., $1,175,000.

Loft, New York, N. Y., Trinity Church Corp. to White Constr. Co., $1,000,000.

Classified Index of Bids Wanted

Waterworks

Bids close		*See Eng. News-Record*
June 25	Dayton, O.	June 17
June 25	Boston, Mass.	June 24
June 28	New York, N. Y.	June 24
June 28	Willimantic, Conn. Adv. June 17 and 24.	June 24
June 29	Milwaukee, Wis.	June 24
June 29	New York, N. Y.	June 24
June 29	Brooklyn, N. Y.	June 24
June 29	Wheeling, W. Va.	June 24
June 29	Detroit, Mich.	June 10
June 30	Providence, R. I.	June 10
June 30	Newark, N. J. Adv. June 17 and 24.	June 17
June 30	Burlington, N. J.	June 24
June 30	Connecticut	June 24
July 1	Berea, O.	June 17
July 2	Cincinnati, O.	June 24
July 2	Oakland, Calif.	June 24
July 3	Columbus, O.	June 24
July 6	Fairfield, Calif.	June 24
July 9	Troy, N. Y. Adv. June 24.	June 24
July 11	Grover (Tiltonville), O.	June 24
July 13	Sioux Falls, S. D. Adv. June 24.	June 24
July 14	Binghamton, N. Y. Adv. June 24.	June 24
July 19	Charleston, Mo. Adv. June 24.	June 24
July 22	Newark, N. J. Adv. June 24.	June 24

Sewers

June 25	Erie, Pa.	June 10
June 25	New York, N. Y.	June 17
June 28	South Belmar, N. J.	June 17
June 28	Grandview Heights (Columbus P. O.), O.	June 24
June 29	St. George, N. Y.	June 24
June 29	St. Louis, Mo.	June 10
June 29	Exeter, Neb.	June 24
June 29	Winterset, Ia.	June 24
June 30	Akron, O.	June 24
July 1	Canton, O.	June 24
July 1	Madison, Wis.	June 24
July 6	Lynn, Mass.	June 3
July 6	Jackson, Mich.	June 17
July 7	White Bear Lake, Minn.	June 24
July 11	Grover (Tiltonville), O. Adv. June 24.	June 24
July 12	Fulton, Ky.	June 17
July 13	St. Louis, Mo.	June 17
July 13	Los Angeles, Calif.	June 24

Waste Disposal

July 12	Ambridge, Pa. Adv. June 24.	June 24
July 21	Orlando, Fla. Adv. June 24.	June 24

Bridges

Bids close		*See Eng. News-Record*
June 26	Missouri	June 24
June 28	Providence, R. I.	June 10
June 28	New Jersey	June 10
June 28	Rock Rapids, Ia.	June 24
June 29	Maryland	June 24
June 29	Newton, Ia.	June 24
June 29	Manhattan, Kan.	June 10
June 29	North Carolina	June 17
June 29	Bronxville, N. Y. Adv. June 10 to 24.	June 10
June 29	Idabel, Okla.	June 24
June 29	Oklahoma	June 24
June 30	Racine, Wis.	June 10
July 1	Louisiana	June 10
July 1	Missouri	June 24
July 2	New Hampshire	June 24
July 2	Los Angeles, Calif.	June 10
July 2	Vero Beach, Fla.	June 17
July 6	California	June 17
July 6	Stockton, Calif.	June 17
July 6	Red Bluff, Calif.	June 24
July 7	New Jersey Adv. June 24.	June 24
July 9	Tribes Hill, N. Y. Adv. June 17 and 24.	June 17
July 9	Roanoke, Va.	June 17
July 9	Hutchinson, Kan.	June 24
July 12	New Jersey Adv. June 24.	June 24
July 13	Oskaloosa, Kan.	June 24
July 15	Clayton, La. Adv. June 17 and 24.	June 17
July 15	Louisiana	June 24
July 16	Huntington, W. Va.	June 17
July 21	Wilkes-Barre, Pa. Adv. June 24.	June 24

Dams

June 30	Reading, Pa. Adv. June 10 to 24.	June 10

Excavation, Drainage, Irrigation, Levees, River and Harbor

June 25	Port Burwell, Ont.	June 10
June 25	Boston, Mass.	June 24
June 28	Tampa, Fla.	June 24
June 29	Welland, Ont.	June 10
July 1	Scituate, Mass.	June 24
July 2	Cleveland, O.	June 24
July 3	Morgantown, Ky.	June 17

Streets and Roads

June 25	Seaside, Ont.	June 17
June 25	New York, N. Y.	June 17
June 25	Vermont	June 24
June 26	Waynesburg, Pa.	June 24
June 26	Milwaukee, Wis.	June 24
June 28	St. Paul, Minn.	June 17
June 28	Kentucky	June 3
June 28	New Jersey	June 10
June 28	Larchmont, N. Y.	June 17
June 28	Muskegon, Mich.	June 17
June 28	Milwaukee, Wis.	June 24
June 28	Evanston, Ill.	June 24
June 28	Connecticut Adv. June 24.	June 24
June 28	Minneapolis, Minn.	June 24
June 28	Grandview Heights (Columbus P. O.) O.	June 24
June 28	Carroll, Ia.	June 24
June 29	Tampa, Fla.	June 24
June 29	Rutherford, N. J. Adv. June 24.	June 24
June 29	Oklahoma	June 24
June 29	Carthage, Tex.	June 24
June 29	Uvalde, Tex.	June 24
June 29	Graham, Tex.	June 24
June 29	Omaha, Neb.	June 24
June 29	Wisconsin	June 24
June 29	Galesburg, Ill.	June 24
June 29	New York, N. Y.	June 24
June 29	Brooklyn, N. Y.	June 24
June 29	Columbus, O.	June 24
June 29	Trenton, N. J. Adv. June 17 and 24.	June 17
June 29	Louisiana	June 10
June 29	North Carolina	June 10
June 29	Kennett, Mo.	June 17
June 29	West Palm Beach, Fla. Adv. June 17 and 24.	June 17
June 29	Massachusetts	June 17
June 29	Massachusetts	June 24
June 29	Tampa, Fla.	June 24
June 29	Arkansas	June 24
June 29	Columbus, Miss.	June 24
June 29	Maryland	June 24
June 29	Louisiana	June 24
June 30	Keosauqua, Ia.	June 24
June 30	Grand Forks, N. D.	June 17
June 30	New York Adv. June 17 and 24.	June 17
June 30	Cleveland, O.	June 24
June 30	Brooklyn, N. Y.	June 24
June 30	Ontario	June 24
June 30	Portland, Ore.	June 24
July 1	Nebraska	June 24
July 1	Jamestown, N. D.	June 24
July 1	Anderson, Tex.	June 24
July 1	Auburn, Ala.	June 17
July 1	Gretna, La.	June 17
July 1	Ft. Scott, Kan.	June 24
July 1	Missouri	June 24
July 2	Spencer, W. Va.	June 24
July 2	New Hampshire	June 24
July 2	Girard, Kan.	June 17
July 2	Omaha, Neb.	June 17
July 2	Nebraska	June 24
July 2	Maine	June 24
July 2	Dayton, O.	June 24
July 3	Everittstown, N. J.	June 24

See proposal advertising on page 137

TRADE "LEADITE" MARK
Registered U. S. Pat. Office

A list of the Country's principal cities, large and small—

Is a list of the satisfied users of LEADITE.

Leadite Users are Leadite Boosters

EAST or West, North or South, take your pick of the cities—and you'll find many of them on the customer list of Leadite—

The country's principal cities, large and small—the country's representative water works engineers, construction companies and water works departments of industrial plants, railroads and mines are strong for Leadite for jointing cast iron water mains—

Are demonstrating what you will be able to do when you use Leadite—

What, for instance?—

You will do away with the need for caulking—or the need for digging out for large bell holes.

You will be able to use Leadite for all sizes of pipe from 4 in. to 60 in. diameter—under all pressures and conditions—

Give Leadite a trial.

Leadite resists electrolysis.

Leadite does not corrode or rust.

Leadite has been successfully tested and used for over 30 years.

Thousands of miles of pipe jointed with Leadite are in service.

The up-to-date water works man specifies and uses LEADITE.

LEADITE saves at least 75%

LEADITE is the pioneer self-caulking material for c. i. pipe

Be Sure It Is LEADITE and Accept No Imitations

THE LEADITE COMPANY, Inc.
1511 Land Title Building, Philadelphia, Pa., U. S. A.

NO CAULKING

Bids close		See Eng. News-Record
July 3	Garnett, Kan.	June 24
July 5	Fowler, Ind.	June 17
July 5	Williamsport, Ind.	June 17
July 5	Jasper, Ind.	June 17
July 5	St. Petersburg, Fla.	June 24
July 5	New Augusta, Miss.	June 24
July 6	Crawfordsville, Ind.	June 24
July 6	San Diego, Calif.	June 24
July 6	Oroville, Calif.	June 17
July 6	South Bend, Ind.	June 17
July 6	Auburn, Ind.	June 17
July 6	California	June 17
July 6	Kingston (Ind. br. Wilkes Barre), Pa. Adv. June 17 and 24.	June 17
July 6	St. Louis, Mo.	June 17
July 6	Morgantown, W. Va.	June 3
July 6	Akron, O.	June 24
July 6	Bedford, Ind.	June 24
July 6	Bound Brook, N. J. Adv. June 24.	June 24
July 6	Delhi, La.	June 24
July 6	St. Louis, Mo.	June 24
July 7	Vero Beach, Fla.	June 3
July 7	Pennsylvania Adv. June 17 and 24.	June 17
July 7	New Jersey Adv. June 24.	June 24
July 7	Indiana	June 24
July 7	South Bound Brook, N. J. Adv. June 24.	June 24
July 8	Portland, Ind.	June 17
July 9	New York Adv. June 24.	June 24
July 9	Palestine, Tex.	June 24
July 12	Kentucky	June 24
July 12	New Jersey Adv. June 24.	June 24
July 13	St. Louis, Mo.	June 17
July 14	Delaware Adv. June 24.	June 24
July 14	Alabama	June 24
July 15	Girard, Kan.	June 17
July 16	Cincinnati, O.	June 24
July 19	Minneapolis, Minn.	June 24
July 19	Apalachicola, Fla. Adv. June 17 and 24.	June 24
July 25	Michigan	June 17
July 27	Louisiana	June 24

Buildings—Commercial

June 25	Kansas City, Mo.	June 17
June 25	Cleveland, O.	June 24
June 25	Phila., Pa.	June 24
June 26	Chicago, Ill.	June 24
June 28	Milwaukee, Wis.	June 24
June 28	Omaha, Neb.	June 24
June 28	Northville, Mich.	June 24
June 30	San Antonio, Tex.	June 24
June 30	Los Angeles, Calif.	June 17
June 30	Pittsburg, Kan.	June 10
July 1	Texarkana, Tex.	Apr. 22
July 1	Opelika, Ala.	June 17
July 1	Milwaukee, Wis.	June 24
July 1	Chicago, Ill.	June 24
July 2	Norristown, Pa.	June 24
Aug. 2	Cleveland, O.	June 24
July 6	Riverside, Calif.	June 10
July 7	Sullivan, Ind.	June 3

Bids close		See Eng. News-Record
July 12	Charleston, W. Va.	June 10
Sept. 1	Vancouver, B. C.	Apr. 22

Buildings—Industrial

June 28	Cincinnati, O.	June 10
June 28	Phila., Pa.	June 24
June 29	Fairport Harbor (br. Painesville), O.	June 24

Buildings—Educational, Religious

June 25	Massillon, O.	June 24
June 25	Bryn Mawr, Pa.	June 24
June 26	Hartford, Conn.	June 24
June 28	Springfield, Mass.	June 24
June 28	Shaker Heights (mail Cleveland), O.	June 24
June 28	Phila., Pa.	June 24
June 29	Dallas, Tex.	June 24
June 29	Wanakena, N. Y.	June 10
June 29	Chicago, Ill.	June 10
June 29	Columbia, Mo.	June 17
June 29	Indianapolis, Ind.	June 24
June 30	Bedford, Ia.	June 24
June 30	Des Moines, Ia.	June 24
June 30	Covington, Ky.	June 17
July 1	Newburgh, N. Y.	June 10
July 1	New Haven, Conn.	June 17
July 2	Morgantown, W. Va.	June 10
July 2	South Bend, Ind.	June 24
July 2	Columbus, Miss.	June 24
July 6	South Williamsport (Williamsport P. O.), Pa.	June 24
July 7	West Brighton (mail West New Brighton), N. Y.	June 24
July 14	San Francisco, Calif.	June 17

Federal Government Work

June 25	Extension—Rome, N. Y.	June 10
June 25	Extensions, etc.—Brooklyn, N. Y.	June 17
June 28	Dredging—New York, N. Y. Adv. June 3 to 24.	June 3
June 28	Breakwater — Milwaukee, Wis. Adv. June 3 to 24.	June 3
June 28	Lookouts, etc.—Hamilton, O.	June 10
June 29	Dredging — Wilmington, Del. Adv. June 3 to 24.	June 3
June 29	Lock House—Huntington, W. Va. Adv. June 3 to 24.	June 3
June 30	Revetment—Kansas City, Mo.	June 10
June 30	Remodeling—Hazleton, Pa.	June 17
June 30	Remodeling—Evansville, Ind.	June 17
July 1	Engines, etc.—Wash., D. C.	June 10
July 1	Pier—Charleston, S. C. Adv. June 10 to 24.	June 10
July 1	Remodeling—Cumberland, Md.	June 10
July 1	Stone—San Luis Obispo, Calif.	June 17
July 2	Dredging — New Haven, Conn. Adv. June 3 to 24.	June 3

Bids close		See Eng. News-Record
July 6	Dikes—Rocheport, Mo.	June 24
July 6	Revetment—New Orleans, La.	June 24
July 7	Motors, etc.—Wash., D. C.	May 13
July 7	Levees—Pittsburg, Miss. Adv. June 17 and 24.	June 17
July 7	Dredging—Phila., Pa.	June 24
July 9	Hull—Memphis, Tenn. Adv. June 10 to 24.	June 10
July 12	Rock Removal—Newark, N. J.	June 10
July 12	Tailrace, etc.—Nebraska-Wyoming	June 10
July 15	Dredging—Hawaii	May 13
July 15	Metal Work—Louisville, Ky. Adv. June 17 and 24.	June 17
July 20	Transformers — Florence, Ala.	June 17
July 23	Breakwater—Providence, R. I. Adv. June 24.	June 24
July 27	Hospital — Northport, N. Y. Adv. June 24.	June 10
July 29	Dredging—Los Angeles, Calif. Adv. June 24.	June 24

Unclassified

June 25	Air Compressor—Farmingdale, N. Y.	June 3
June 29	Grand Stand and Field House — Brookline (br. Boston), Mass.	June 24
June 30	Hull—Syracuse, N. Y. Adv. June 24.	June 24
July 1	Ornamental Lighting System—Upland, Calif.	June 24
July 2	Swimming Pool—Cleveland, O.	June 24
July 6	Ornamental Lighting System—Los Angeles, Calif.	June 24
July 7	Platform Extensions—New York, N. Y.	June 24
July 20	Electrical Equipment—New York, N. Y.	June 24
Aug. 16	Turbo-Generator—Moose Jaw, Sask.	June 24
Sept. 30	Crane Gantries, etc.—Otahulu, New Zealand	May 20

Materials

June 25	Joint Bars, etc.—Phila., Pa.	June 17
June 25	Steel Bars, Shapes, etc. — Phila., Pa.	June 17
June 25	Steel Pipe, etc. — Phila., Pa.	June 17
June 29	Gravel—Louisiana	June 10
June 29	Cement, etc.—New Orleans, La.	June 10
June 29	Wire Cable, etc.—Phila., Pa.	June 17
June 29	Cement—New York, N. Y.	June 24
June 29	Timber, etc. — Milwaukee, Wis.	June 24

News of New Work

Waterworks

Proposed Work

Mass., Springfield — City, Bd. Water Comrs., plans 40 ft. concrete dam, Colley Brook. $25,000 or more. Morris Knowles, Inc., 507 Washington Bldg., Pittsburgh, Pa., engrs.

W. Va., Notter Fort—Election Aug. 3, $33,000 bonds, waterworks. H. P. Squires, mayor.

Ill., Collinsville—Election June 29, $40,000 bonds, enlarging and repairing water distribution system. Noted Mar. 4.

Ia., Sutherland — Making preliminary plans steel tank on tower, 3 mi. c.i. distribution mains, sewage disposal plant, outlet sewers, etc., in various streets. $65,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Minn., Minneapolis — Bd. Park Comrs. making plans constructing dam and sluice gates in Minnehaha Creek, $7,000; also concrete reservoir $16,000. A. E. Berthe, City Hall, engr.

Kan., Claflin—Election June 25, $40,000 bonds new waterworks. W. B. Rollins & Co., 521 Railway Exch. Bldg., Kansas City, Mo., engrs.

Kan., Ossatowomie — Defeated $55,000 bonds, water and light improvements. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs. Noted Apr. 15.

Mo., Kansas City—Plans waterworks improvements and extensions. H. F. McElroy, city mgr. $3,000,000-$4,000,000.

Mo., Kirkwood—Election July 11, $150,000 bonds reconstructing and extending waterworks. Noted June 17.

Mo., Smithville—Election July 6, $50,000 bonds, waterworks. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs.

Wash., Shelton—Made plans 8 in. pipe line and 200,000 gal. wood stave tank. $65,000. C. O. Mannes, city engr. Noted Mar. 25.

THESE reports are grouped under each class (water-works, sewers, etc.) and under each stage of the work (proposed, bids desired, etc.), according to the following geographic sections: New England, Middle Atlantic, South, Middle West, between Mississippi and Rocky Mountains, Far West, and Canada.

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk, or corresponding official.

Bids Desired

Mass., Boston—June 25, by Dept. Pub. Wks., laying and relaying mains in Alaric, Perham and Whiting Sts., Cottage Ave. and Hopkins Rd., in West Roxbury; and Hurlcroft Ave., in Dorchester. $15,000. J. H. Sullivan, comr.

Connecticut — June 30, by Comn. Water Supply, c/o Hartford Connecticut Trust Co., 750 Main St., Hartford, N. D. Prince, secy., 1,500 ft. 4 and 6 in., 3,900 ft. 8 in. and 4,600 ft. 10 in. c.i. pipe for Mansfield State Training School; also 400 ft. 4 and 6 in., 600 ft. 8 in. and 6,600 ft. 10 in. c.i. pipe, for Connecticut Agricultural College.

Conn., Willimantic—June 28, waterworks improvements, Contrs. 1, 2 and 3. H. W. Taylor, 149 Bway., New York City, consult. engr.; adv. E. N.-R. June 24.

N. Y., Binghamton — July 14, by State Hospital Comn., Albany, sanitary work, replacing and extending watermains, etc., at Binghamton State Hospital, here; adv. E. N.-R. June 24.

N. Y., Brooklyn — June 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York City, mains in Clermont, Fillmore and Lincoln Aves., Adelphi, 64th Sts., etc., here.

N. Y., New York — June 28, by P. J. Dooling, comr. Purchase, Municipal Bldg., c.i. pipe, special and valve box castings, etc., for Dept. Water Supply, Gas & Electricity.

N. Y., New York — June 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in City Island, Edson, Fenton, Furman, Hammersley Sts., etc.; also in Carpenter, Manor, Matthews, Metcalf, Pugsley Sts., etc.

N. Y., Troy — July 9, by Bd. Contr. & Supply, City Hall, H. G. Richmond, secy.,

Constr. News page 400

Quick-Hardening Concrete
Makes Driveway Ready for Use With Least Interruption to Business

Concrete Placed July 2 Ready for Use After July Fourth Holiday

A driveway was needed at the plant.

"But," said the president, "this is our busy season—we can't afford to tie up our trucking long enough for the concrete to harden."

"With this new discovery we don't need to," answered the superintendent. "Now we can get concrete that's as strong in *3 days* as ordinary concrete is in *28 days*. By using the methods explained in this circular [furnished on request] and standard *Universal* cement—the same kind of *Universal* we've always used—our contractor can place the concrete on Friday night, July 2, and on Tuesday, when we come back to work the driveway will be ready for use. We will have lost only half a day."

"In that case," said the president, "let's get the contractor on the phone at once and make arrangements at the plant to start."

The same idea can be applied any Friday and the improvement or repair will be ready for use the following Tuesday with an interruption to business of a day and a half. Detailed information on the methods for obtaining strong concrete in *3 days* with standard *Universal* cement sent promptly on request. Simply use the coupon below.

Universal Portland Cement Co.

Chicago Pittsburgh Minneapolis Duluth Cleveland Columbus New York

Concrete for Permanence

Universal Portland Cement Co.
210 South La Salle Street, Chicago.
Please send me details on how to obtain strong concrete in *3 days* with standard *Universal* cement.

Name.....

Address.....

Waterworks (Continued)

repairing Tomhannock Spillway. G. S. Thompson, 257 Bway., consult. engr.; adv. E. N.-R. June 24.

N. J., Burlington—June 30, by Bd. Water Comrs., 1,460 lin.ft. 6 in. mains, etc. in various streets. G. A. Allison, Burlington, engr.

N. J., Newark—July 22, by North Jersey Dist. Water Supply Comn., 24 Commerce St., constructing West Brook Viaduct. M. R. Sherrerd, consult. engr. A. H. Pratt, ch. engr.; adv. E. N.-R. June 24.

W. Va., Wheeling—June 29, by City, H. C. Lane, clk., c.i. pipe and fittings. J. N. Chester Engineers, Pittsburgh, Pa., engrs.; adv. E. N.-R. June 24.

O., Cincinnati—July 2, by Comrs. Hamilton Co., 82,349 ft. 6- to 8-in. c.i. mains in Water Supply Line 28, Dist. 7 (Fruit Hill and Forrestville), $192,513. L. C. Boyatt, Court House, engr. Noted Apr. 8.

O., Columbus — July 3, by Bd. Comrs. Franklin Co., O. Moore, clk., 12,810 ft. 6- to 12-in. c.i. water mains, etc., in Sewer Dist. 4, $28,000; also 11,630 ft. 8 and 10 in. vitr. sewer in Sewer Dist. 4, $19,000. E. G. Bradbury, 406 Court House Annex, engr.

O., Grover (Tiltonville) — July 11, by Village, at office B. Harris, clk., water supply and distribution system. H. C. Althar, 1st Natl. Bank Bldg., Bellaire, engr.; adv. E. N.-R. June 24.

Ill., Evanston—See "Streets and Roads."

Wis., Milwaukee—June 29, by Central Bd. Purchases, J. W. Nicholson, ch. buyer, 650 tons Class "C" c.i. pipe and 40 tons special castings. J. Schwada, city engr.

S. D., Sioux Falls — July 13, by City Comrs., fabricating and erecting 300,000 gal. elevated steel tank, wells, well houses, etc. Maury & Gordon, 1445 Monadnock Blk., Chicago, Ill., consult. engrs.; adv. E. N.-R. June 24.

Mo., Charleston—July 19, by C. L. Joslyn, mayor, and E. H. Smith, city clk., waterworks, incl. wells, etc. F. L. Wilcox, Chemical Bldg., St. Louis, consult. engr.; adv. E. N.-R. June 24.

Calif., Fairfield — July 6, by Supervs. Solano Co., 22,050 ft. 4- to 8-in. c.i. mains, etc. in Vallejo Annex. To exceed $25,000. F. A. Steiger, Fairfield, co. surv. Noted June 17.

Calif., Oakland — July 2, by Directors East Bay Municipal Utility Dist., Ray Bldg., furnishing and installing gates and screens, etc., for San Pablo and Lafayette Screening Chambers, Mokelumne River Project, Schedules 1 and 2.

Bids Received

N. Y., Long Island City — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York City, mains in Elmhurst, Lamont, 5th, Herrick, 34th Aves., etc., here, from Bruno Costanzo, 2777 Myrtle Ave., Brooklyn, $6,930; and in Elmhurst, Lamont, 37th Aves., here, from G. V. Cornell, 30 Egbert Pl, St. George, $48,898. Noted June 17.

N. Y., New York — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., June 18, mains in Bryant, Garrison, Jerome, Longfellow Aves., etc., also in DeKalb, Harrison Aves., etc., from Riverdale Water Works Corp., 335 East 113th St., $12,500 and $14,100 respectively. Noted June 17.

N. Y., St. George — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York City, mains in Bogert, Cloverdale, Craig Aves., etc., here, from Knight & DeMicco, Inc., 448 East Tremont Ave., New York City. $23,434. Noted June 17.

O., Cincinnati—Director Pub. Serv., June 1, 120 tons 4- to 24-in. hub and spigot c.i. pipe, etc. to water distribution system, for Mt. Airy Water Tanks, from U. S. Cast Iron Pipe Co., Addyston, $8,833. Engrs. est. $10,000.

Wis., Milwaukee—Dept. Pub. Wks., R. E. Stoelting, comr., June 14, 8,337 ft. c.i. mains in various streets, from F. E. Kaminski, 745 46th Ave., West Allis, $27,124.

Minn., Minneapolis — F. S. Gram, city purch. agt., June 15, 686 tons 24 in. Class "B" c.i. pipe, from Amer. Cast Iron Pipe Co., 712 Plymouth Bldg., $5.85 per ft. Noted June 10.

S. D., Mitchell—F. McGovern, city aud., June 7, elevated steel tank and tower, from Pioneer Bridge Co., Mitchell, $15,955. Engrs. est. $15,000.

Contracts Awarded

Mass., Amesbury — Water Works Dept., iron removal plant, 1 and 2 story, rein.-con., brick, to S. C. Sperry Co., 292 Main St., Cambridge, $76,000.

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York City, steel and c.i. mains in Ocean Parkway, Church and Gravesend Aves., to Penstock Constr. Co., Sharon, Pa., $451,644. Noted June 10.

N. J., Ocean City—City Comn., extending mains, etc., in various streets, to A. N. Bugbee, 219 East Hanover St., Trenton, $86,090.

N. J., Rahway — Bd. Water Comrs. coagulation basin, new filter plant, etc., to Tuller Constr. Co., 95 Monmouth St., Red Bank, $76,065. Noted June 17.

Pa., Phila.—Dept. Pub. Wks., Bureau of Water, Contrs. 795 and 818, to Acme Machine Co., 316 North 17th St., $24,398 and $21,517 respectively; Contr. 801, to Kober Constr. Co., 34 South 17th St., $254,435, and Contr. 826, to P. and A. J. Ellis, Inc., 4th and Wyoming Sts., $41,275. Grand total $341,625. Noted June 17.

O., Cleveland — Comrs. Cuyahoga Co., 9,000 ft. 6- to 12-in. c.i. mains in Clague, Hall and Dover Center Rds., Impvt. 1052, and 18,000 ft. 6- to 12-in. in Cahoon, Bassett and Bradley Rds., Impvt. 1053, to F. Hadded, Davis & Farley Bldg., Cleveland, $47,520 and $81,691 respectively. Noted June 17.

Mich., Berkley—Village, 6 and 8 in. c.i. mains, etc. in various streets, to T. C. Brooks, Jackson, $28,000.

Mich., Detroit—Bd. Fire Comrs., 3,000 ft. of 6 in Class "B" c.i. pipe, to U. S. Cast Iron Pipe Co., East Burlington, N. J. at $48.95 per ton.

Ill., Elmhurst—Drilling well and furnishing pump, to S. B. Geiger, 1435 Old Colony Bldg., Chicago, Ill., $43,000.

Ill., Niles Center—Village, 6- to 12-in. c.i. mains in Devonshire Manor Subdivision, to Krenn & Dato, North Michigan Ave. and Walton Pl.; in Grosse Pointe Rd. and Laramie Ave., to N. Santucci, Oak Park. Noted Feb. 19.

Neb., Fremont—Water & Light Comrs., general contract pump house pumps and piping, to Worthington Pump & Mchy. Co., 115 Bway., New York City, N. Y., $17,310.

N. D., Fargo—City Clerk, large distribution main at west end of city between north and south sides, to W. E. Kennedy, Fargo, $66,256. Engrs. est. $85,000. Noted May 20.

Mo., Conception—Abbey, c/o Procurator, 1 m.g. rein.-con. storage reservoir, to J. Reggle, Conception.

Mo., Webster Groves (Ind. br. St. Louis) —Steel tank on tower, to V. E. Taylor, 110 Orchard St., $23,069. Noted Apr. 1.

Wash., Seattle—Bd. Pub. Wks., mains in Ashworth Ave. et al, to J. L. Smith, 304 West 36th St., $58,014. Engrs. est. $63,-184. Noted June 17.

Sewers

Proposed Work

Conn., New Britain — Plans extending sewers in various streets and sewage plant. $50,000. J. W. Williams, city engr.

Conn., West Haven (br. New Haven)— Plans sewerage system for Allingtown section. $90,000.

O., Canton—Soon takes bids constructing 2 mi. West Side intercepting sewer from 9th St. S. W. along valley of West Creek, connecting with North Canton sewer at North corporation line. $200,000. W. E. Sarver, City Hall, engr.

Ia., Sioux City—See "Streets and Roads."

Ia., Sutherland—See "Waterworks."

Neb., Columbus—Making plans sewers in various streets. $75,000. C. E. Devlin, Columbus, engr. Noted Apr. 8.

Ark., Conway—Making preliminary plans sewage disposal plant and sanitary sewers in various streets. $52,000. E. Hale, Citizens Bank Bldg., Pine Bluff, engr. Noted Mar. 4.

Mo., St. Joseph — Election July 14, $1,036,000 bonds, sewers in various streets. W. M. Spann, City Hall, engr.

Mo., Smithville—Election July 6, $30,000 bonds sewage disposal plant and sanitary sewers in various streets. W. B. Rollins & Co., 521 Ry. Exch. Bldg., Kansas City, engrs.

Okla., Medford—Defeated $30,000 bonds, sewers in various streets. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs. Noted Apr. 8.

Okla., Muskogee—Made plans 18,182 ft. 6 and 8 in. sewers in Sewer Dist. 62. $40,-057. J. R. March, Muskogee, engr.

Okla., Red Fork—Voted $35,000 bonds, new sewerage system. W. E. Davis, Cole Bldg., Tulsa, engr. Noted May 13.

Calif., Los Angeles — Los Angeles Co. made plans 41,965 ft. 8- to 12-in. cement main sewers and 49,000 ft. 6 in. cement house sewers, etc. in Mountain View Ave., etc. To exceed $100,000.

Calif., Merced—Plans election $100,000 or more bonds, extending sewerage system.

Bids Desired

N. Y., St. George — June 29, by J. A. Lynch, pres. Richmond Boro, Boro Hall, temporary sanitary sewer in Grand Ave. from Victory Blvd. to Rugby Rd.

O., Akron—June 30, by W. E. Peters, dir. Pub. Serv., 15,000 ft. 8- to 48-in. storm and sanitary sewer in Riverside Dr. et al., 2 $86,450, and 3,755 ft. 8- to 30-in. in Riverside Dr. et al., 1 $27,300; 3,370 ft. 8- to 42-in. trunk and local sewers and house connections in Black St. et al., $31,100; also 5,975 ft. 8- to 20-in. sanitary sewer in West Exchange St. et al., $39,800. J. E. Root, Municipal Bldg., engr.

O., Canton—July 1, by J. A. Gossett, dir. Pub. Serv., 3rd Sect. West Side Intercepting Sewer, 11,250 ft. brick, segment, block or rein.-con. pipe. W. E. Sarver, city civil engr.; adv. E. N.-R. June 24.

O., Columbus—See "Waterworks."

O., Grandview Heights (Columbus P. O.) —June 28, by G. B. Welsh, village clk., approximately 2,700 ft. 15-to 42-in. vitr. sewer in various streets. Approximately $30,000. Burgess & Niple, 568 East Broad St., Columbus, engrs.

O., Grover (Tiltonville)—July 11, by B. Harris, village clk., sewer in 1st or South Sewer Dist. and 2nd or North Sewer Dist. H. C. Arthar, 1st Natl. Bank Bldg., Bellaire, engr.; adv. E. N.-R. June 24.

Wis., Madison—July 1, by W. R. Winckler, city clk., twin grit chamber, grease extractor, 6 Imhoff and 1 dosing tanks, etc., for sewage disposal plant. E. E. Parker, City Hall, engr.

Ia., Winterset—June 29, by E. Travis, city clk., 89,700 ft. 8- to 18-ft. clay or cement sewers, pumping plant and disposal plant, etc. Burns & McDonnell Eng. Co., Interstate Bldg., Kansas City, Mo., engrs. Noted Mar. 25.

Minn., White Bear Lake — July 7, by L. M. Rief, city clk., 67,631 ft. 8- to 21-in. vitr. sewers in various streets, also 2 pumping stations and disposal plant. $50,000. Pillsbury Eng. Co., 2344 Nicollet Bldg., Minneapolis, engr.

Neb., Exeter—June 29, by Village, c/o P. R. Farmer, clk., 20,384 ft. 8- to 12-in. sewers, 15,000 ft. ditch flushing, pumping station, outlet main and disposal plant. $47,000. Grant, Fulton & Letton, 525 South 13th St., Lincoln, special engrs.

Calif., Los Angeles—July 13, by Los Angeles Co. Sanitation Dist. 1, portion Wright Rd. Trunk Line Sewer, 7,566 ft. 24 in., 3,333 ft. 27 in., 2,843 ft. 20 in. rein.-con. pipe or vitr. clay pipe. A. K. Warren, Law Bldg., Los Angeles, engr.

Bids Received

Wis., La Crosse — Bd. Pub. Wks., June 11, 12,135 ft. 8- to 15-in. vitr. sewers, etc. in 9 streets, from E. T. Webster, 1463 Goodrich Ave., St. Paul, Minn., $34,812.

Calif., Oakland—From Smith Constr. Co., Syndicate Bldg., sewers in Edith St. between Park Rd. and Florence Ave. and also portions Florence Ave., 5,475 ft. 8 in. vitr. pipe at $3.50 per ft., 570 ft. 10 in. vitr. pipe $3.60, 15 ft. 10 in. wrought iron, steel pipe $4, etc.

Calif., Oceanside—J. H. Landes, city clk., vitr. and c.i. sewerage system, from O. K. Hearte, 1530 Paloma St., Pasadena, $165,-580. Noted June 3.

Contracts Awarded

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., outlet barrel stave sewer and pumping facilities at 5th Ave. near 10th St., Flushing Bay, College Point Rd., Ward 2, incl. pumping stations and connections between sewers, to Fishbach & Moore, Inc., 222 East 42nd St., New York City, $39,470. Noted May 13.

Md., Salisbury—Water and Sewer Comn., 25,000 lin.ft. sewers in North Division and 13 other streets, to Martin Constr. Co., Albert Lea, Minn. $47,400.

O., Cleveland — Comrs. Cuyahoga Co., 9,000 ft. 8 and 24 in. vitr. tile sewer in Overlook Dr., Impvt. 95, to Langenhan Constr. Co., Marshall Bldg., $67,434. Noted June 17.

O., Cleveland—For 2,870 ft. 12- to 24-in. vitr. tile 11,470 ft. 3-C and 1,470 ft. 2½ ft. C brick sewer in West 150th St., to Kassouff & Co., 3182 West 25th St., $32,080; 1,135 ft. 12- to 24-in. tile sewer in Crescent Ave., to E. Cesa, 2462 Baldwin Rd., $6,151; and 875 ft. 12- to 18-in. in Guardian Blvd., to Yahya Bros., 3196 West 25th St. Noted June 17.

O., Cleveland—Vitr. tile sewer in Pearl Rd., to Amata Constr. Co., 706 The Arcade, $53,222. Noted June 17.

O., Cincinnati—Director Pub. Serv., 587 ft. 24 in. vitr. clay and 460 ft. 33 in., 1,170 ft. 36 in., 326 ft. 51 in. brick trunk sewer

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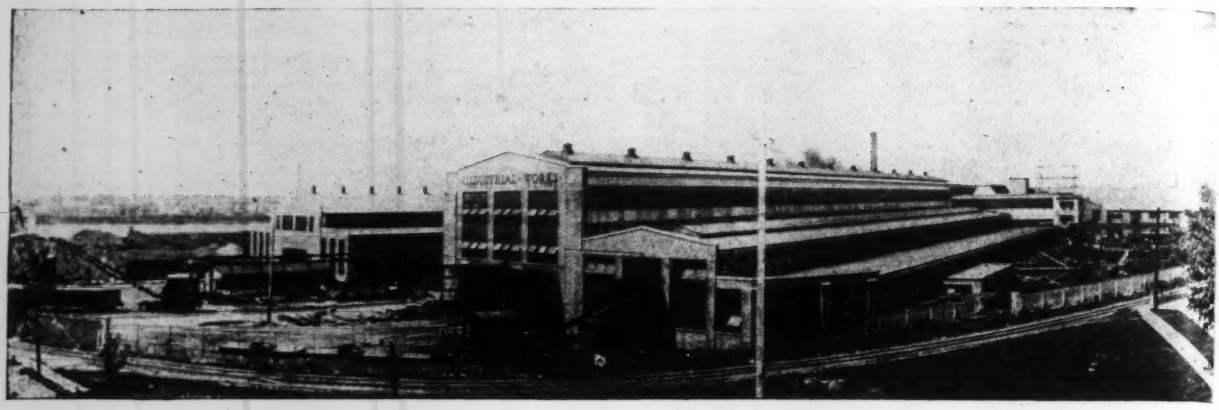

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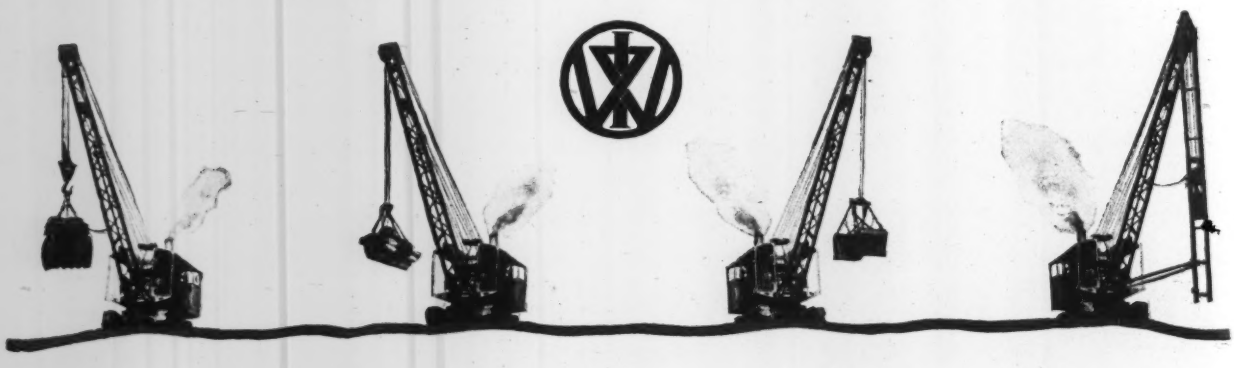

Sewers (Continued)

in ravine north of Foley Rd., to J. J. Welling, 2943 Lischer Ave., $23,503. Engrs. est. $26,700. Noted June 10.

O., Massillon — Sanitary sewer in Columbia Heights, Oak and Warrick Sts., to J. Whitman Co., Massillon, $27,546. Engrs. est. $25,000.

Mich., Detroit—Vitr. brick and concrete sewers in tunnel 2,801 lin.ft. in Seven Mile Rd. Arm, Sect. 5, and Lateral Sewer 4601, to A. Rossi, 5307 Pennsylvania Ave., $128,458 and $17,500 respectviely; 4,955 ft. Ashland Ave. Sewer, Sect. 3, to B. Hayes, Inc., Meyers Rd. and Union Belt Line R.R. tracks, $195,670; 4,596 ft. Ashland Ave. Sewer, Sect. 4, and 5,155 ft. Sect. 5, to Central Contg. & Eng. Co., 17576 Wyoming Ave., $168,205 and $123,442 respectively; 2,542 ft. Bedford Rd. Sewer, Sect. 4, to P. Cappello, 9779 Kresge Ave., $29,661; 4,592 ft. Schoenherr Rd. Arm, Ashland Ave. Sewer, to W. Blanck Co., 40 Seven Mile Rd., $154,249; Lateral Sewer 4578, to J. and A. Pontarelli, Transportation Bldg., $11,450; Lateral Sewers 4597 and 4602, to United Sewer Corp., 516 Transportation Bldg., $32,000 and $13,600 respectively; Lateral Sewer 4603, to Louwers & Sommerville, 8014 Grand River Ave., $8,770, Lateral Sewer 4614, to F. Divito, 4174 Russell St., $2,100. Grand total $885,106.

Ill., Decatur—City, North Side Sewer Improvement, incl. mains, laterals, etc., to Merkle Constr. Co., Davidson Bldg., Kansas City, Mo., $358,212. Engrs. est. $442,876. Noted Jan. 21.

Ia., Schaller — M. E. Currie, city clk., sewage disposal plant and 1,200 ft. 12 in. outlet sewer, etc., in various streets, to Weighton Constr. Co., 436 Grain Exch., Sioux City. Engrs. est. $25,000. Noted Apr. 1.

Kan., Wathena — Disposal plant and sewers in various streets, to Asplund Constr. Co., Tecumseh, Neb., $33,705. Noted May 13.

Tex., Panhandle — City, c/o W. P. Stephen, secy., sanitary sewerage system and disposal plant, to W. B. Carter, Sioux City, Ia., $111,899. Noted June 10.

Calif., Long Beach — Constructing Pump Dist. 6 (Burnett St., etc.), to J. Artukovich, 626 North Bunker Hill St., Los Angeles, $173,385. Noted June 17.

Calif., Los Angeles — Los Angeles Co., vitr. sewers in West Hollywood and Sherman Dists., Co. Impvt. 140, to Dalmatin & Nikcevich, 841 West 62nd St., Los Angeles, $170,670.

Calif., Redwood City—City Council, 17,140 lin.ft. 4- to 8-in. vitr. sewer, etc., in Central Park and Wooster-Witton and Montgomery subdivision, to G. D. DeGolyer, Bacon Bldg., Oakland, $20,567. Noted May 6.

Ont., Toronto—York Twp., 4,350 lin.ft. 21- to 42-in. vitr. tile trunk sewer in Sunnybrae, Crescent, Jane St., Bartonbelle, Cornell, Emmett and Buttonwood Aves., to Nelson River Constr. Co., Bank of Hamilton Bldg., $51,884. Engrs. est. $50,000.

Man., Gypsumville—Dept. Pub. Wks., Reclamation Dept., Parliament Bldgs., Winnipeg, constructing drain, here, to Tomlinson Constr. Co. Ltd., 711 Confederation Life Bldg., Winnipeg, at $0.215 per cu.yd. Engrs. est. $43,000.

Waste Disposal

Bids Desired

Pa., Ambridge—July 12, at office A. W. Johns, boro. mgr., garbage incinerators, chimney, building and ramp; adv. E. N.-R. June 24.

Fla., Orlando—July 21, by L. M. Autrey, mayor and City Comn., City Hall, incinerator. J. A. Stinson, city clk.; adv. E. N.-R. June 24.

Bridges

Proposed Work

New Hampshire—State Hy. Dept., Concord, plans 1 span, 32 ft. rein.-con. deck girder bridge over Hampton River, $40,000, also bridge and approaches on 0.056 mi. East Side Rd., $40,000, both in Hampton, Rockingham Co. F. E. Everett, comr. W. A. Grover, Portsmouth, div. engr.

Md., Glenburnie (br. Baltimore)—State Roads Comn., Baltimore, making plans concrete bridge over Marley Creek, near here. $25,000. J. N. Mackall, Garrett Bldg., Baltimore, chn.

Ill., Chicago—City soon takes bids superstructure 210 x 86 ft. trunnion bascule bridge over Chicago River at La Salle St. T. G. Philfeldt, City Hall, engr. Noted Mar. 11.

Kan., Lawrence—Douglas Co. plans one 40 ft., one 56 ft. and one 122 ft. marsh arch bridge, on Federal Aid Project 315-D. E. E. Trueblood, Lawrence, engr.

Mo., Louisiana — Missouri-Illinois Bridge Co., c/o C. G. Buffum Lumber Co., making plans rein.-con. and steel vehicular bridge connecting Illinois and Missouri State Highway Systems, here. $1,000,000. Harrington, Howard & Ash, 1012 Baltimore St., Kansas City, engrs. Noted May 20.

Tex., Batesville — See "Streets and Roads."

Tex., Clairemont — See "Streets and Roads."

Tex., Laredo—See "Streets and Roads."

Tex., Lubbock—See "Streets and Roads."

Okla., Shawnee—State Hy. Dept., Oklahoma City, making preliminary plans new 2 span 140 ft. steel truss bridge on concrete piers over Canadian River, on Highway 3, Pottawatomie Co., here. $35,000. J. M. Page, highway engr.

Bids Desired

New Hampshire — July 2, by State Hy. Dept., Concord, three 1 span, 50 ft. rein.-con. bridges, one on Sta. 5 plus 00 one Sta. 26 plus 00 to 26 plus 50, and other Sta. 59 plus 75, all in Marlboro. F. E. Everett, comr. E. S. Hastings, engr.

New Hampshire — See "Streets and Roads."

New Jersey—July 7, by State Hy. Dept., Trenton, reconstructing 5 bridges on Route 7, Sects. 6 and 7, Middlesex and Monmouth Counties. A. L. Grover, secy.; adv. E. N.-R. June 24.

New Jersey — July 12, by State Hy. Comn., Trenton, reconstructing bridge over Pensauken Creek at M. P. 3.6 on Route 2, in Burlington and Camden Counties. A. L. Grover, secy.; adv. E. N.-R. June 24.

Pa., Wilkes-Barre—July 21, by T. T. Butts, controller Luzerne Co., removing existing stone masonry, etc. and constructing new rein.-con. and stone bridge at Market St. B. H. Davis, Whitehall Bldg., New York City, engr.; adv. E. N.-R. June 24.

Maryland — June 29, by State Roads Comn., Baltimore, 60 ft. span rein.-con. arch bridge over Ballenger Creek, on Buckeytown Pike, about 3 mi. south of Frederick, Contr. F-84, Frederick Co. J. N. Mackall, chn.; adv. E. N.-R. June 24.

Louisiana—July 15, by State Hy. Comn., Baton Rouge, Bayou Macon Bridge, 120 ft. riveted steel thru truss span, on Federal Aid Project 170 A, Lake Providence-Oak Grove Highway, East and West Carroll Parishes. W. B. Robert, Reymond Bldg., Baton Rouge, engr.

Wis., Milwaukee—See "Materials."

Ia., Newton—June 29, at office Auditor Jasper Co., 1 pony truss, 3 I-beam and 9 slab bridges, also 80 box culverts. R. McMurray, Newton, co. engr.

Ia., Rock Rapids — June 28, at office Auditor Lyon Co., one 40 x 20 ft. pony truss and two 26 x 28 ft. I-beam bridges, also 9 box and 23 circular culverts.

Kan., Oskaloosa—July 13, by Clerk Jefferson Co., three 40 ft. deck girder and one 140 ft. steel truss span bridges, and grading Federal Aid Project 222. R. C. Ham, Oskaloosa, co. engr.

Missouri — July 1, by State Hy. Dept., Jefferson City, 10 rein.-con. and steel bridges in Benton, Cooper, Dent, Putnam, Ripley and Wright Counties. B. H. Piepmeier, ch. engr. Noted June 17.

Mo., Bosworth—June 26, by Carroll Co. (Carrollton) and Chariton Co. (Keytesville), constructing 542 ft. steel span, 14 ft. in Carroll Co. and 104 ft. span in Chariton Co., with 175 ft. center span, over Grand River, near here. $50,000. Noted Apr. 15 under "Missouri."

Oklahoma—June 29, by State Hy. Dept., Oklahoma City, 1 span 88 ft. truss bridge on concrete piers at Durant, Bryan Co., 8.05 tons reinforcing, 840 ft. concrete piling, etc., $30,000; 1 80 ft. steel truss bridge on concrete piers at same town, 10.63 tons reinforcing, 1,200 ft. concrete piling, etc., $38,000; concrete culverts on Federal Aid Project 141-C, 14.21 tons reinforcing, 210 ft. concrete pipe, etc., $25,000, on same road, Sect. D, 5.08 tons reinforcing, etc., $25,000, on Federal Aid Project 142-A, 5.87 tons reinforcing, 253 ft. concrete pipe, etc., $25,000, on same road Sect. B, 5.58 tons reinforcing, 140 ft. concrete pipe, etc., $25,000, and on same road, Sect. C, 23.84 tons reinforcing, 2,400 cu.yd. excav., 2,100 ft. concrete, and 1,320 ft. wooden piling, etc., $25,000, all at Marietta, Love Co.; concrete culvert on Federal Aid Project 220-C, at Adair, Mayes Co., 7.23 tons reinforcing, etc., $25,000. J. M. Page, highway engr.

Okla., Idabel — June 29, by State Hy. Dept., Oklahoma City, 2 span 100 ft. truss bridge, here, McCurtain Co. $25,000. J. M. Page, highway engr.

Calif., Red Bluff—July 6, by State Hy. Comn., 515 Forum Bldg., Sacramento, three 70 ft. span rein.-con. girder bridge across Reeds Creek, here, Tehama Co. R. M. Morton, highway engr.

Bids Received

Mass., Lancaster — Concrete bridge and approaches, from Milliken & Armstrong, 57 Eddy St., Providence, R. I., $25,459. Noted June 10.

N. Y., Brooklyn — A. Goldman, comr. Plant & Structures, Municipal Bldg., New York City, new center pier fender at Metropolitan Ave. Bridge over English Kills, here, from Rhodes & Manvel, Inc., 90 West St., New York City $17,900. Noted June 10.

New Jersey—State Hy. Comn., Trenton, June 21, constructing bridge over Cooper River, on Camden Connecting Road-South, Camden Co., from Brann & Stuart, Commercial Trust Bldg., Phila., Pa., $118,847; also removing old bridge over Raritan River, between Perth Amboy and South Amboy, Middlesex Co., from G. Wickberg & Son, 130 Catalpa St., Perth Amboy, $78,000. Noted June 3.

Pennsylvania — Comrs. Allegheny Co. (Pittsburgh), masonry and approach filling for bridge over Monongahela River, connecting McKeesport and Duquesne, from Vang Constr. Co., Bessemer Bldg., $429,445. Engrs. est. $510,000.

Pa., Mercer—Comrs. Mercer Co., constructing Clarksville Bridge 1802, Pymatuning Twp., from Milliron Constr. Co., Dubois, $54,049. Noted May 13.

Illinois—State Dept. Pub. Wks. & Buildings, Div. Highways, Springfield, June 9, 23 ft. span concrete slab and 50 ft. span concrete girder bridges on Route 7, Sect. 31-B, La Salle Co., from Porter-McCulley Constr. Co., Mackinaw, $21,407; 30 ft. span concrete slab bridge, 100 ft. and 60 ft. span concrete substructure on Route 13, Sect. 28-B, St. Clair Co., from G. H. Goodlink, Lawrenceville, $19,478; 100 ft. span and 60 ft. span steel superstructure on Route 13, Sect. 28-C, St. Clair Co., 233,260 lb. reinforcing, etc., from Vincennes Bridge Co., Vincennes, Ind., $16,440; six 70 ft. spans concrete arch bridge on Route 18, Sect. 13-D, Kendall Co., from Chernus Constr. Co., 524 McKnight Bldg., Minneapolis, Minn., $76,849. Noted May 27 and June 3.

Contracts Awarded

New Hampshire—State Hy. Dept., Concord, concrete bridge and bituminous macadam approaches, in East Kingston, to Ames Constr. Co., Somersworth. Engrs. est. $25,000.

Massachusetts—Commonwealth of Massachusetts, Dept. Pub. Wks., Boston, concrete bridge in Westminster and Winchester to A. W. Loud, 42 Brook St., Wollaston, $61,058. Noted May 20.

Massachusetts—Dept. Pub. Wks., Boston, 2 concrete bridges with bituminous macadam approaches in Conway to O. J. Kennedy & Co., Inc., Holyoke, $46,529; and concrete bridge and approaches on section Highway in Middleborough, to Milliken & Armstrong, Providence, R. I., $20,683. Noted June 17.

Mass., Cambridge (Boston P. O.) — Harvard University, granite limestone and brick memorial foot bridge over Charles River connecting Harvard University and Harvard Business School (Brighton), to T. Stuart & Son, 22 Pearl St., Boston, $194,845. Noted May 20.

Mass., Falmouth — Bd. Selectmen, concrete and timber bridge over Herring River, to F. O. Taylor, 190 Kempton St., New Bedford. Engrs. est. $25,000.

N. Y., Cohoes—Bd. Contr. & Supply, City Hall, bridge over Mohawk River, connecting Bridge Ave. and Ship St., to T. F. Gratton Co., Cohoes. Noted May 27.

Virginia—See "Streets and Roads."

Va., Alexandria—State Hy. Comn., Richmond, bridge over Hunting Creek, on Richmond-Washington Highway, here, to E. K. Williams, Richmond, $25,000. Noted May 20.

North Carolina—State Hy. Dept., Raleigh, rein.-con. bridge, etc. on Project 6690, Rowan Co., to J. S. Bowers, Whiteville, $30,881. Noted Mar. 18.

Mich., Grand Rapids — Director Pub. Serv., 1,500 ft. rein.-con. viaduct, to Folwell-Ahlskog Co., 393 North Michigan Ave., Chicago, Ill. $190,000. Noted Apr. 29.

Mich., Grosse Pointe Park (br. Detroit)—Village, 2 rein.-con. arch bridges at Fox Creek, Whittier and Audubon Aves., to Swingle & Robinson, South Biddle Ave., Wyandotte, Mich. Engrs. est. $25,000.

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Don't let your PAYMENTS outlast your PAVEMENTS

BUSINESS street, residence avenue or country highway, they are all the same from the viewpoint of the *Tax-Payer's Pocketbook*. Only one type of pavement available at reasonable first cost has repeatedly proved its ability to *outlast the bonds issued to pay for it*—VITRIFIED BRICK.

Think this over—name any street or road in your neighborhood *not paved with brick* which has given even 20 years of service. And then recall the fact that here in the United States there are brick pavements in use which were laid 35 to 45 years ago, while Holland is using brick pavements built at Napoleon's order.

Which, to your mind, is the economical policy in paving—to build with "cheap," short-lived materials which will require continuous repair and may not last even 10 years—or to pay an only slightly higher first cost for vitrified brick and get a pavement that will outlast the bonds and may even outlive you?

VITRIFIED Brick PAVEMENTS

OUTLAST THE BONDS

NATIONAL PAVING BRICK MANUFACTURERS ASSOCIATION, ENGINEERS BLDG., CLEVELAND, OHIO

Bridges (Continued)

Ill., Chicago—Bd. Pub. Wks., Room 406, City Hall, A. A. Sprague, comr., electrical equipment for double leaf trunnion bascule bridge over Calumet River, at 100th St., to Norwood, Noonan Co., 450 West Superior St., $48,226. Noted June 3.

Wis., LaCrosse — C. C. Congdon, City Hall, engr., 160 ft. rein.-con. deck girder bridge over La Crosse River, to Wausau Iron Wks., 738 South 10th Ave., Wausau, $67,400. Noted May 27.

Iowa — Shelby Co. (Harlan) 15 high truss and 4 high truss bridges with I-beam approaches in various sections county, to Standard Bridge Co., 1302 City Natl. Bldg., Omaha, Neb., $127,788.

Iowa—State Hy. Comn., Ames, one 32 ft. and one 35 ft. deck girder bridge, one 40 ft. I-beam bridge and 19 culverts in Crawford Co., to Jensen Constr. Co., Kimballton, $29,858; one 40 ft. I-beam bridge and 21 culverts in Mills Co., to Wilson Concrete Co., Red Oak, $12,360.

Kan., Medicine Lodge—See "Streets and Roads."

South Dakota—State Hy. Comn., Pierre, constructing 150 ft. through steel truss and 100 ft. timber trestle approach spans, etc. on State Aid Project 134, Stanley Co., to Western Bridge Co., 748 Peters Trust Bldg., Omaha, Neb., $13,975; also 180 ft. through concrete girder bridge, on Federal Aid Project 12, Minnehaha Co., to W. R. Larson Constr. Co., Sioux Falls, $19,473; and grading 1.29 mi. State Aid Project 42, Corson Co., to England & England, Murdo, $17,416. Grand total $50,864. Noted May 27.

Wyoming—See "Streets and Roads."

Idaho—Comrs. Pub. Wks., at Idaho Hotel, Coeur d'Alama, 128 ft. steel span and 575 ft. pile trestle over Spokane River, on Federal Aid Project 101-A, Kootenai Co., to Illinois Steel & Bridge Co., Hutton Bldg., Spokane, Wash., $43,322. Noted May 20.

California—State Hy. Comn., Sacramento, **(e. e. means engineers estimate)**, five 54 ft. and eight 36 ft. 9 in. span rein.-con. girder bridge across Santa Ana River, Orange Co., to C. & F. W. Steffgen, Spreckels Bldg., San Diego, $98,875 e. e. $102,817; two 8 x 10 ft. rein.-con. box culvert extensions at Hess Brook, 6 x 8 ft. rein.-con. box culvert at Maddocks Creek, 20 ft. span rein.-con. girder bridge across Boulder Creek, and 4 x 4 ft. rein.-con. box culvert at an unnamed stream, all foregoing in Santa Cruz Co., to Noble Bros., San Jose, $14,833 e. e. $13,652; ten 19 ft. span timber bridge across New River, two 28 ft. span across Tamarack Canal, and one 19 ft. span across Trifolium Canal, all foregoing in Imperial Co., to N. B. Conway, Holtville, $14,199 e. e. $14,203. Grand total $127,907. Noted June 10.

Dams

Bids Desired

Tex., Nocona—Nocona Country Club, c/o W. F. Leonard c/o F. & M. Bank, taking bids 900 ft. earthern dam, 15 ft. high 9,427 yd. borrow and 333 yd. core wall channel excav., also 360 yd. plain rip rap. $30,000. Private plans.

Contracts Awarded

Wis., Stevens Point — Wisconsin River Paper & Pulp Co., 201 Wisconsin Ave., Neenah, replacing with concrete, approximately 800 ft. dam, 22 ft. high on Wisconsin River south of here, to C. R. Meyer & Son. Co., 50 State St., Oshkosh. Noted May 20.

California—R. C. Storrie & Co., (contractor) Alexander Bldg., San Francisco, sub-let contract constructing main Bucks Creek Storage Dam, 1,200 ft. long on top, 125 ft. high, in Plumas Co., to H. H. Boomer, Zeigler Bldg., Spokane, Wash., for Feather River Power Co. Approximately $1,000,000.

Railways

Proposed Work

Illinois—St. Louis, Troy & Eastern R.R. Co., St. Louis, Mo., B. L. Brown, ch. engr., plans extending 1.53 mi. railroad, etc. in Madison Co., here. $863,000.

Minnesota — Chicago, Milwaukee & St. Paul R.R. Co., Union Station, Chicago, Ill., C. F. Lowther, ch. engr., plans 10.5 mi. extending to Southern Minnesota div. from Hollandale to Maple Island, Freeborn Co., here.

Minnesota — Chicago, Rock Island & Pacific R.R. Co., Morse, ch. engr., La Salle Sta., Chicago, Ill., plans extending 9.3 mi. Iowa-Minnesota div. from Clark's Grove through Hollandale to Maple Island, Freeborn Co., Minn.

Bids Desired

Quebec—See "Contracts Awarded."

Bids Received

Pennsylvania — A. C. Shand, ch. engr. Pennsylvania R.R. Co., Broad St. Sta., Phila., June 10, constructing concrete viaduct, abutments, piers, laying track, etc. along Delaware River Extension in 25th St. between Ellsworth St. and Passyunk Ave., Contr. 18, from O'Neill Co., 127 East Mermaid Lane, Phila., $1,595,571. Noted June 3.

Contracts Awarded

New York—New York Central R.R. Co., Grand Central Terminal, New York City, grading for 3rd track from Voorheesville to South Schenectady, to Walsh Constr. Co., 605 Kahl Bldg., Davenport, Ia., $975,000.

Minnesota—Northern Pacific Ry. Co., Ry. Bldg., St. Paul, approximately laying 4 mi. tracks, constructing 3 rein.-con. and steel bridges over streets and laying 75,000 cu.yd. excav., etc. for grade separation work in northeast Minneapolis, to Industrial Contg. Co., 3050 4th Ave. South, Minneapolis, approximately $100,000. Owner furnishes materials.

Minnesota — Minnesota Western Ry., E. D. Luce, vice-pres. and genl. mgr., 2823 6th Ave., Minneapolis, grading, etc. approximately 100,000 cu.yd. track bed between Minneapolis and Lake Lillian, to Lobnitz & Davy, Olivia. Engrs. est. $25,000. Noted May 20.

California—Southern Pacific R.R. Co., 65 Market St., San Francisco, grade embankments in railroad yards, in San Jose, to San Jose Sand & Gravel Co., San Jose, $29,200. Noted Mar. 18.

Quebec—Canadian Pacific Ry., Windsor Sta., Montreal, J. M. R. Fairbairn, ch. engr., will build 6 mi. railway line between Maniwaki and Chelsea, by day labor. Noted June 3.

British Columbia—Pacific Great Eastern R.R. Co., 736 Granville St., Vancouver, approximately 1 mi. cutoff, north of Tillooet, to Georgia Constr. Co., Ltd., Bank of Toronto Bldg., Vancouver, $130,000.

Excavation, Drainage, Irrigation, Levees, River and Harbor

Proposed Work

Tex., Eagle Pass—Maverick Co. Irrigation Dist. voted $50,000 bonds, defray expenses surveying, etc. irrigating 65,000 to 100,000 acres in Maverick. C. E. Wright, Eagle Pass, co. engr.

Tex., Luling — L. H. Bridges & J. T. Dickens, making preliminary plans irrigating, etc., 3,000 acres on Plum Creek. $60,000. Private plans.

Bids Desired

Mass., Boston—June 25, by Schoolhouse Dept., excavating for 2nd unit High School, Warren and Townsend Sts., Lewis Dist. $25,000. F. E. Slattery, chn.

Mass., Scituate—July 1, by Bd. Selectmen, dredging channel, building bulkhead, making fill and installing certain drains. $25,000. Private plans.

Fla., Tampa—June 28, by G. B. Knowles, 1st Natl. Bank Bldg., Bradenton, constructing 392,374 cu.yd. mains, laterals, etc., in Hillsborough Co., here, for Manatee Valley Drainage Dist. $40,000.

O., Cleveland—July 2, by City, bulkheading Edgewater Park along Lake Erie, 4,000 ft. sheet piling and stone work. $400,000. R. Hoffman, City Hall, engr. Noted Apr. 29.

Tex., Nocona—See "Dams."

Ont., Valleyfield — June 22, by L. E. O'Brien, secy. Dept. Pub. Wks., Ottawa, dredging, deepening channel, 35,000 cu.yd. clay, hardpan, gravel, etc., here. $50,000. K. M. Cameron, Dept. Pub. Wks., Ottawa, engr.

Bids Received

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, June 15, excavating open well caissons, constructing foundation piers and enclosure of New Civil Courts Building, at 12th and Chestnut Sts., from Fruin-Conlon Constr. Co., Merchants Laclede Bldg., $240,000. Noted May 20.

Contracts Awarded

New York—T. F. Farrell, comr. Canals & Waterways, Albany, repairing Glens Falls Feeder Barge Canal, Contr. M-13, to W. M. Bronk, Hudson Falls, $24,779; bank protection in Champlain Canal, Contr. M-15, to J. W. Holler, Inc., Fort Edward, $22,241; new movable dam at Rocky Rift, Contr. M-16, to Scott Bros. Constr. Co., 117 North Washington St., Rome, $85,953; dredging in Champlain Canal, Contr. M-14, and in Barge Canal from Vischer Ferry to Lock 14, Contr. 230, to Amer. Pipe & Constr. Co., Packard Bldg., Phila., Pa., $102,764 and $88,427 respectviely, from Lock 21 to Sylvan Beach, Contr. M-17, to I. M. Luddington's Son, Inc., Rochester, $90,000. Bot. Martinsville-Pendleton, Erie Co., Contr. M-18, to Dunbar & Sullivan Dredging Co., 2312 Buhl Bldg., Detroit, Mich., $45,200, and Barge Canal from Indian Castle to Herkimer, Contr. 231, to J. W. Hennessey, Inc., 452 Bway., $166,938. Grand total $626,302. Noted Mar. 11, Apr. 1 and 15.

Minnesota—See "Railways."

Neb., Omaha — Papio Valley D. D. 2, Douglas Co. 1,053,700 cu.yd. drainage work, to Callahan-Walker Constr. Co., 804 1st Natl. Bank Bldg., at $0.0524 per cu.yd. Noted June 10.

Wash., Bellingham—Bellingham Terminal Syndicate, 400,000 cu.yd. excav. and filling 22 acres, etc., in Squalicum Creek Waterway, to Puget Sound Bridge & Dredging Co., Central Bldg., Seattle, and Columbia Valley Lumber Co., Bellingham. $100,000.

Ont., Goderich—S. E. O'Brien, secy. Dept. Pub. Wks., Ottawa, dredging in harbor, here, to W. L. Forrest, Goderich, $42,500.

Streets and Roads

Proposed Work

New Hampshire—State Hy. Dept., Concord, plans grading, gravel surfacing 1.091 mi. Contoocook Valley St., in Hillsboro, $28,000. F. E. Everett, comr. A. E. White, Keene, div. engr.

New York—A. W. Brandt, comr. Highways, Albany, rejected bids June 11, constructing Repair Contr. 3147-1522, Highway 856, Sandy Hill-Glens Falls Rd., Warren Co. Will readvertise. Noted June 3.

N. J., Trenton — Bd. Freeholders Mercer Co. plans bituminous paving 1.5 mi. Pennington-Centerville Rd. $60,000. H. F. Harris, Court House, engr.

N. J., Westwood—Mayor and Boro Council rejected bids June 1, grading and macadam paving Clairmont Ave. Will readvertise. Noted June 10.

Pa., Swissvale—Defeated $200,000 bonds, improving various streets. J. D. Hall, city engr. Noted Apr. 8.

Pa., Tarentum—Plans brick paving 9,000 yd. 7th Ave., and concrete paving 9,000 yd. 7th Ave. C. E. Miller, city engr.

W. Va., Charleston—Washington Dist., Kanawha Co. election July 1, $61,000 bonds, improving roads. R. N. Moulton, co. clk.

Miss., Amory — Bd. Aldermen rejected bids May 24, grading, curbing and rock asphalt paving, etc., 22,500 sq.yd. various streets. Will readvertise. A. L. Dabney, Columbian Tower Bldg., Memphis, Tenn., engr. Noted May 20.

Miss., Bay Springs — Jasper Co. plans election $100,000 bonds grading and graveling 14 mi. Dist. 3 (Louin-Newton Highway). J. L. Wheless, Hattiesburg, engr.

Miss., Columbia—Marion Co. soon takes bids grading and graveling 11 mi. Columbia-Bogalousa Rd., and 8 mi. Columbia-Bassfield Rd. J. L. Wheless, Hattiesburg, engr. Noted June 17.

Tenn., Covington—Plans paving various streets. $25,000 bond issue soon.

Ky., Cynthiana — Harrison Co. voted $150,000 bonds, improving various roads. Noted May 6.

O., Lisbon—Comrs. Columbiana Co. soon take bids grading and resurfacing 5 mi. East Liverpool-East Palestine Rd., 16 ft. $70,000. L. C. Kirk, Lisbon, engr. Noted Sept. 17.

Michigan — State Hy. Dept., Lansing, takes bids about June 25, grading, etc., 1.5 mi. T. L. 39-13, Ingham Co. C. Vinton, Jackson, resident engr.

Michigan — State Hy. Dept., Lansing, takes bids about June 30, grading and concrete paving 7 mi. F. A. 138, Midland Co. R. W. Roberts, Saginaw, engr.

Michigan—H. C. Fleming, resident engr., Grand Rapids, takes bids about June 29, grading, etc., 2.5 mi. T. L. 54-17 in village Newaygo, for State Hy. Dept., Lansing.

Mich., Muskegon Heights—Making plans and takes bids about July 1, grading and

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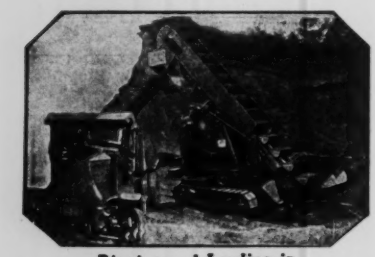

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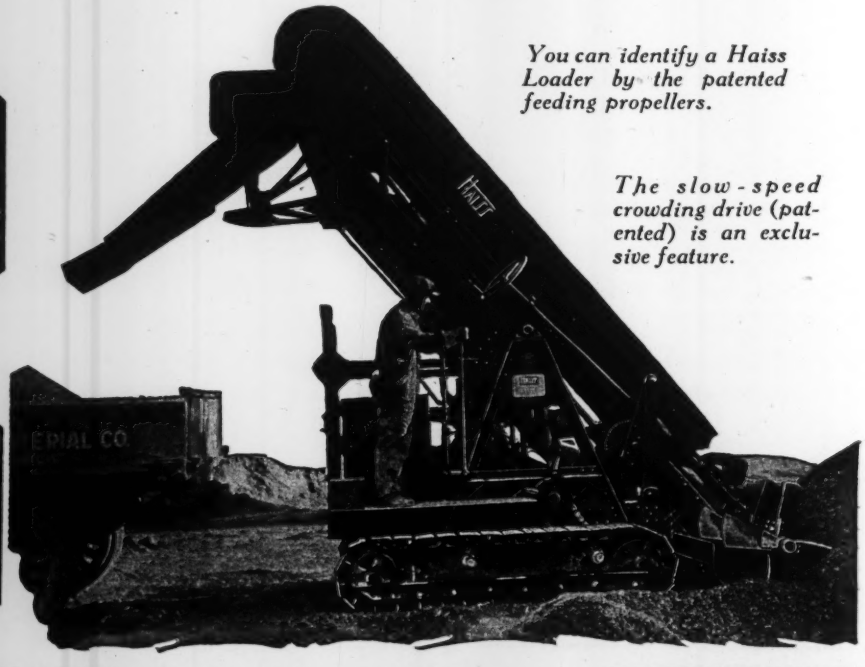

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Streets and Roads (Continued)

concrete paving 15,000 sq.yd. Baker, South 7th and South Peck Sts. $50,000. C. Gamble, City Hall, engr.

Ill., Chicago — Cook Co. Highway Dept. soon takes bids concrete paving Cicero Ave. from 147th to 195th Sts. $336,047. County furnishes concrete. G. A. Quinlan, County Bldg., engr.

Ill., East St. Louis — Soon takes bids curbing and asphalt paving on old base St. Clair Ave. from V. & C Ry. tracks to 33rd. St., $71,900; also curbing and concrete or asphalt paving St. Louis Ave. from 21st to 29th Sts., $81,700. W. McK. Brown, City Hall, engr. Noted May 20.

Ill., Edwardsville — Making preliminary plans straightening, grading, curbing and concrete paving Schwarz St., incl. subway under Illinois Traction System. $34,000.

Ill., Fairfield—Making preliminary plans grading, curbing and concrete paving various streets. $100,000. Edward Flad & Co., 920 Chemical Bldg., St. Louis, Mo., engrs.

Ia., Iowa City—Plans concrete, brick or asphalt paving 15 blocks various streets. $25,000-$40,000. F. E. Young, city engr.

Ia., Nevada—Soon takes bids asphalt resurfacing 18 blocks Lincoln, 1st to alley between 11th and 12th Sts., Avenues K and J from 5th to 8th Sts., and Avenue J, Avenue E to Chicago & Northwestern R.R. tracks.

Ia., Sioux City—Soon takes bids curbing and concrete paving 2,500 sq.yd. South Hennipin St., 6,600 sq.yd. Gilman Terrace and 3,500 sq.yd. South Cedar St., also 9,000 ft. sewers in Myrtle, Silver Bluff, West 8th and West 20th Sts. L. N. Hintgen, City Hall, engr.

Ia., Vinton—Benton Co. voted $1,500,000 bonds, paving 51.4 mi. and gravel surfacing 30.2 mi. primary roads, and 78.6 mi. secondary roads. M. A. Hall, Vinton, co. engr. Noted Mar. 18.

Ia., Washington — Washington Co. defeated $962,160 bonds, grading, surfacing, etc. 137 mi. various roads. W. P. Rawn, Court House, engr. Noted May 13.

Mo., Joplin — Soon takes bids bituminous paving Joplin St. between 20th and 32nd Sts.; also squeegee asphalt on one course rein.-con. paving Chestnut St. between 9th and 10th Sts., and 14th St. between Main St. and Byers Ave. S. P. Ashcraft, Jr., City Hall, engr.

Mo., Joplin — Soon takes bids warrenite bitulithic concrete paving, etc. 10,500 sq.yd. A St. $21,000; flintkoat paving, etc. 2,550 sq.yd. Sergeant St., $2,550; grading and paving, etc. 3,835 sq.yd. various alleys. S. P. Ashcraft, Jr., City Hall, engr.

Mo., Lamar—City Council plans paving around Public Square. $35,000.

Mo., St. Joseph—Election July 14, $813,-000 bonds, improving streets and parkways. W. M. Spann, City Hall, engr.

Ark., Texarkana—Soon takes bids grading, curbing, concrete paving, etc., Paving Dist. 49. $57,860. C. S. Christian, 425 State Natl. Bank, engr.

Ark., Warren—Soon takes bids grading, curbing, brick, asphalt or concrete paving Street Impvt. Dist. 4. $80,000. E. F. Peterson, Texarkana, engr.

Tex., Batesville — Zavalla Co. making plans grading, bridging and gravel surfacing 32 mi. Highway 55, 18 ft. $390,000. G. Lott, Carrizo Springs, engr.

Tex., Brenham—Washington Co., c/o J. H. Chappell, judge, takes bids after June 28, concrete paving 18.3 mi. Highway 36. $560,000. State appropriates $300,000 towards cost. G. A. Brocher, Brenham, engr. Noted June 17.

Tex., Clairemont—Kent Co., c/o H. W. Davis, judge, takes bids after June 28, grading, bridging and gravel surfacing 40 mi. Highway 84. $400,000. State appropriates $200,000 towards cost. L. M. Ferlet, Clairemont, engr.

Tex., La Grange—Fayette Co., c/o T. H. Lueders, making plans grading, bridging and gravel surfacing 6 mi. Highway 44, $119,475. R. E. Schiller, La Grange, engr.

Tex., Laredo—Webb Co. making plans grading, bridging and bituminous macadam paving 12.4 mi. Highway 12-A, $299,000; also 1.24 mi. same road at Aquilares crossing, $31,000. T. E. Huffman, Laredo, engr.

Tex., Lubbock — Lubbock Co., c/o C. Nordyke, judge, making plans grading and bridging 17.587 mi. Highway 7, Federal Aid Project 503-C. $160,000. B. K. Garrett, Lubbock, engr.

Okla., Frederick — Making preliminary plans brick paving in Dist. 16, $25,000; and in Dists. 17 and 18, $30,000. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., engrs.

Wash., Seattle—Bd. Pub. Wks., rejected bids May 28, improving 40th Ave. N. et al. $50,000. J. D. Blackwell, City Hall, engr. Will readvertise. Noted June 17.

California—State Hy. Comn., Sacramento, withdrew bid call of July 6, concrete grading and paving 5 mi. road between Oxnard and Hueneme Rd. R. M. Morton, Forum Bldg., Sacramento, engr. Noted June 17.

Calif., Burlingame—City Trustees take bids about July 6, improving Easton Dr., etc., 8,544 cu.yd. grading, 101,733 sq.ft. concrete guttering, 227,650 sq.ft. 4½ in. concrete base, 1½ in. Warrenite surfacing, etc. To exceed $80,000. J. James, city engr.

Calif., El Centro—Supervs. Imperial Co., open bids about July 16, improving about 30 mi. road from point 2½ mi. east of Bond Corner Store to Seeley, 1,728,909 sq.ft. 6 in. and 820,326 sq.ft. 5 in. macadam paving, 12,742 sq.ft. 5 in. and 3,776 sq.ft. 6 in. concrete guttering, 26,215 cu.yd. excav., etc. To exceed $500,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr. Noted May 15.

Calif., Los Angeles — Plans widening 6 mi. Santa Barbara Ave. between Alameda St. and Mesa Dr., $1,500,000; and 5 mi. Exposition Blvd. between Main St. and Jefferson St., $3,000,000. J. C. Shaw, City Hall, engr.

Calif., Los Angeles—Los Angeles Co. rejected bids, curbing, walks and 3 in. macadam paving 133,340 sq.ft. Impvt. 399, Los Angeles Ave. between Michigan and Sycamore Aves.

Calif., San Rafael—Supervs. Marin Co. soon take bids, grading and rock surfacing, etc., 8,000 cu.yd. Point Reyes Rd. from Flood Gate to point 7 mi. west. J. C. Oglesby, San Rafael, co. engr. Noted Oct. 22.

Bids Desired

Maine—July 2, by State Hy. Comn., Augusta, bituminous macadam paving 1.9 mi. Federal Aid Project 100-A, in Calais; graveling 3.75 mi. Federal Aid Project 94-A, Gilead, 4.35 mi. Federal Aid Project 96-A, in Jay, 2.87 mi. Federal Aid Project 97-A, in Strong-Avon, and 3.01 mi. Federal Aid Project 98-B, Gouldsboro-7. P. D. Sargent, ch. engr.

New Hampshire — July 2, by State Hy. Dept., Concord, waterbound macadam paving and 3 bridges 1.48 mi. Monadnock Rd. in Cheshire, $100,000; bituminous macadam and crushed gravel paving 1.89 mi. Dartmouth College Stretes in Grafton, $61,-000. F. E. Everett, comr. C. H. Brooks, Littleton, div. engr.

Vermont—June 25, by State Hy. Dept., Montpelier, rein.-con. paving 1 mi. highway in Manchester. $30,000-$40,000. A. J. Runnells, State House engr.

Massachusetts—June 29, by Dept. Pub. Wks., Boston, bituminous macadam paving 4,000 ft. highway in Rockport, and 2,500 ft. in Shirley. W. F. Williams, comr.

R. I., Providence — June 28, by City, 12,301 sq.yd. sheet asphalt or bitulithic resurfacing 12,301 sq.yd. driveway, Roger Williams Park. Private plans.

Connecticut — June 28, by J. A. Macdonald, highway comr., bituminous macadam paving in Westport and Wilton; rein.-con. paving in Columbia and Windham, Waterford and Montville; concrete paving in Manchester; stone macadam paving in Preston; trap rock macadam paving, grade crossing elimination and bridge, etc. in Farmington; grading, etc. in Westport and Fairfield; gravel surfacing in Naugatuck; and concrete bridges in New Hartford and Canton; adv. E. N.-R. June 24.

N. Y., Brooklyn—June 29, by Park Bd., at office Dept. Parks, Arsenal Bldg., 5th Ave. and 64th St., New York City, improving Shore Rd. from 4th Ave. to Bay Ridge Ave., here.

N. Y., Brooklyn — June 30, by J. A. Guider, pres. Brooklyn Boro, Boro Hall, granite on 6 in. concrete paving Marginal St. within lines of 29th St., same street within lines of 35th St., and approaches across same street between Flatbush Ave. and Mill basin.

N. Y., New York—June 29, by H. Bruckner, pres. Bronx Boro, Crotona Park, 3rd and Tremont Aves., sheet asphalt on concrete paving River Ave. from East 165th St. to Jerome Ave.

New York—July 9, by A. W. Brandt, comr. State Dept. Pub. Wks., Bureau Highways, Albany, constructing highways in Allegheny, Cattaraugus, Cortland, Delaware, Rockland, Seneca, and Chenango Counties; also reconstructing roads in Erie, Montgomery, Onondaga, Suffolk, Westchester and Warren Counties; adv. E. N.-R. June 24.

New Jersey—July 7, by State Hy. Comn., Trenton, widening Route 1, Rahway-Metuchen Rd., Middlesex Co., and Route 4, Sect. 4, Mays Landing-Egg Harbor Rd., Atlantic Co. A. L. Grover, secy.; adv. E. N.-R. June 24.

New Jersey — July 12, by State Hy. Comn., Trenton, grading and rein.-con. paving Sussex-Hamberg Rd., Route 8, Sect. 8, Sussex Co. A. L. Grover, secy.; adv. E. N.-R. June 24.

N. J., Everittstown—July 3, by H. W. Weller, clk. Alexandria Twp., Mt. Pleasant, penetration macadam paving 3.172 mi. Everittstown-Pittston Rd. G. Davis, Whitehouse Station, engr.

N. J., Bound Brook—July 6, by Mayor and Boro Council, grading, curbing and concrete paving, etc. Mountain Ave. between Main St. and Union Ave. E. L. Belli, boro. clk.; adv. E. N.-R. June 24.

N. J., Rutherford — June 29, by Boro Council, City Hall, rein.-con. paving, etc. Orient Way between Station Sq. and Rutherford Ave. H. E. Allen, boro. engr.; adv. E. N.-R. June 24.

N. J., South Bound Brook—July 7, by Mayor and Boro Council, Main St., grading, curbing and concrete paving Main St. from Canal Bridge to boro line. H. C. Van Emburgh, boro engr.; adv. E. N.-R. June 24.

Pa., Waynesburg — June 26, at office Scott & Hook, attys., 406 Peoples Bank Bldg., bituminous reconstructing 17,154 ft. Ruffs Creek Rd., 16 ft., Morgan Twp., Greene Co.

Delaware—July 14, by State Hy. Dept., Dover, grading, etc., 2.1 mi. Cedar Neck School towards Milford, Contr. 68; 4.2 mi. Townsend-Dexters Cor., Contr. CN-33; and 4.71 mi. Harbeson-Indian Mission, Contr. CS-54; adv. E. N.-R. June 24.

Maryland — June 29, by State Roads Comn., Baltimore, sheet asphalt paving 0.55 mi. Cont. BC-61, Baltimore Co. J. N. Mackall, chn.

W. Va., Spencer—July 2, by Roane Co. Court, grading, bridging, etc. 2.5 mi. Curtis District Rd. from Spencer-Curtis Line to Tanners Run, Curtis Dist. S. P. Whitney, Roane, co. engr.

Fla., Apalachicola — July 19, by F. B. Wakefield, city treas., concrete paving approximately 43,000 sq.yd. various streets; adv. E. N.-R. June 24.

Fla., St. Petersburg — July 5, by S. G. Martin, dir. Finance, widening 30th Ave. north from 9 ft. to 40 ft. $25,000.

Fla., Tampa—June 29, by C. N. Tucker, city purch. agt., City Hall, 3 in. vitr. brick paving 9,500 sq.yd. Taliaferro St., $26,000; 9,500 sq.yd. Woodlawn Ave., $25,000; 9,000 sq.yd. Peninsula Ave., $25,000; 15,000 sq.yd. Virginia and Indian Aves., $40,000; 15,000 sq.yd. Bridge and Georgia Aves., $40,000; 15,000 sq.yd. Plymouth and Orient Sts., $40,000; and 15,000 sq.yd. Fribley and Davis Sts., $40,000. R. D. Martin, City Hall, engr.

Fla., Tampa—June 29, by City Comrs., widening and 3 in. vitr. brick on rock or shell paving 9,000 sq. ft. Morgan St., Jefferson St. from Whiting to Cumberland Sts. and Jefferson St. from Cumberland to Water Sts., $25,000; 9,420 sq.yd. Jefferson St. from Polk to Whiting Sts., $25,000; also 13,000 sq.ft. Jackson St. Grand Central and Swan Aves. $40,000. R. D. Martin, City Hall, engr.

Alabama—July 14, by State Hy. Comn., Montgomery, grading, etc., 27 mi. Heflin-Georgia State line Rd, Cleburne Co. $78,-000, 11 mi. Grand Bay-Theodore Rd., Mobile Co. $36,000, 14.4 mi. Selma-Montgomery Rd., Montgomery Co. $150,000, 8 mi. Florida Short Route from Jackson Gap to Camp Hill $25,000, 3 mi. Abbeyville-Ft. Gaines Rd., Henry Co. $34,000, and 11 mi. Haleyville-Phil Campbell Rd., Marion, Franklin and Winston Counties $36,000; all above roads 18 ft. wide.

Miss., Columbus—June 29, by Mayor and City Council, grading, curbing, guttering and paving 5,807 sq.yd. various streets. R. L. Tottem, Inc., co. engr.

Miss., Fayette—July 6, by Red Lick Rd. Comrs., c/o Chancery Clerks office, grading, graveling, etc. Lerman-Clairborne Co. line-Red Lick Rd., Jefferson Co., $90,000. W. C. Stowell, Fayette, engr.

Miss., New Augusta — July 5, by Bd. Supervs. Perry Co., grading, gravel surfacing, etc. 13 mi. various roads. $150,000. J. L. Wheless, Hattiesburg, engr.

Louisiana—July 27, by State Hy. Dept., Baton Rouge, graveling 6.916 mi. Lake Providence-Oak Grove Highway, Federal Aid Project 170-B, East Carroll Parish, and 2.729 mi. same road, Federal Aid Project 170-C, West Carroll Parish. W. B. Robert, Reymond Bldg., Baton Rouge, high way engr.

Louisiana—June 29, by State Hy. Comn., Baton Rouge, graveling 11.72 mi. Oberlin-DeRidder Highway, Federal Aid Project 167A, Allen Parish; 4.95 mi. Rustville-Oberlin Highway, Federal Aid Project 466 B1, and 11.22 mi. DeRidder-Oberlin Highway, Federal Project 167C, both in Beauregard Parish. W. B. Robert, Reymond Bldg., highway engr.

La., Delhi—July 6, by Mayor and Bd. Aldermen, E. S. Smith, town clk., 1,536 lin. ft. concrete sidewalk on various streets.

Kentucky—July 12, by State Hy. Dept., Frankfort, **(F. A. P. means Federal Aid**

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Streets and Roads (Continued)

Project and S. A. P. means State Aid Project), grading, etc. 14.6 mi. Murray-Eggners Ferry Rd., S.A.P. 42-A, Marshall and Calloway Counties and 3.4 mi. Rockport-Beaver Dam Rd., S.A.P. 45-C, Ohio Co.; surfacing 7 mi. Bardwell-Hickman Co. line Rd., F.A.P. 131-B, Carlisle Co., 4.2 mi. Stovey-Henderson Co. line Rd., F.A.P. 74, Daviess Co., 12 mi. Hickman-Reelfoot Lake Rd., S.A.P. 54-C, Fulton Co., 5.5 mi. Lebanon-Boyle Co. line Rd., S.A.P. 25-A, Marion Co., and 10.7 mi. Taylorsville-Jefferson Co. line Rd., S.A.P. 18-A, Spencer Co. E. N. Todd, highway engr.

O., Akron—July 6, by W. F. Peters, dir. Pub. Serv., grading, curbing, walks and vitr. brick paving 3,940 sq.yd. Schumacher St., $26,700; 6,985 sq.yd. Raymond St., $56,700; 20,650 sq.yd. West Exchange St., $140,000; and 10,100 sq.yd. Eastland Ave., $63,500. E. A. Kemmler, Municipal Bldg., engr. Noted June 3.

O., Cincinnati—July 16, by Bd. Rapid Transit, curbing, guttering, sidewalks, granite block paving 2,100 sq.yd., sheet asphalt paving 12,500 sq.yd. and concrete paving 2,900 sq.yd. Central Parkway from Mohawk to Brighton (Sect. 3), $158,927; vitr. brick paving 6,300 sq.yd. granite block paving 8,100 sq.yd. and sheet asphalt paving 31,500 sq.yd. Central Parkway from Bway. to 12th St. (Sect. 1), $435,016; vertical fibre brick 10,400 sq.yd., granite block 10,200 sq.yd., sheet asphalt 80,000 sq.yd., and concrete 2,900 sq.yd. Central Parkway from Bway. to Mohawk (Sects. 1, 2 and 3), $994,676; also vertical fibre brick 4,100 sq.yd. and sheet asphalt 36,000 sq.yd. Central Parkway from 12th to Mohawk (Sect. 2), $405,436. F. Raschig, City Hall, engr. Noted Mar. 4.

O., Cleveland—June 30, by City, paving East 37th St., Tarrymore Rd. N. E., Mobile Court, Hillgrove Ave. N. E., Lakota Ave. S. W., La Salle Ave. N. E., La Verne Ave. S. W., Lyric Ave. S. W., Mitchell Ave. N. W., Muskoka Ave. N. E., Rathbun Ave. S. W., Sable Ave. N. E., Schenley Ave. N. E., Rosena Ave. N. E. from Lake Shore Blvd. to East 185th St., and Rosena Ave. N. E. from Dorchester Blvd. to Lake Shore Blvd. R. Hoffman, City Hall, engr.

O., Columbus—June 29, by W. H. Duffy, dir. Pub. Serv., grading, curbing, brick and asphalt paving, etc., 4,598 ft. Crescent Rd., Louden Ave., Hague Ave. from Sullivant Ave. to Dartmoor Rd., and Hague Ave. from Broad St. to Cleveland, Cincinnati, Chicago & St. Louis R.R. tracks, 26 ft., brick $110,669, asphalt $92,242.

O., Dayton—July 2, by G. F. Baker, dir. Pub. Serv., rein.-con., asphalt, vibrolithic concrete or amiesite paving 35,000 sq.yd. 5 alleys, Overlook Ave., East 3rd, Brooks and Paw Paw Sts. $100,000. J. F. Hale, city engr.

O., Grandview Heights (Columbus P. O.)—June 28, by G. B. Welsh, village clk., grading, concrete curbing, asphaltic concrete or sheet asphalt paving 900 ft. Lincoln Rd., 30 ft. roadway. $28,000. Burgess & Niple, 568 East Broad St., Columbus, engrs.

Indiana—July 7, by J. D. Williams, dir. State Hy. Comn., Indianapolis, bituminous macadam paving Rd. 15, Sect. "S," Carroll Co.

Ind., Bedford — July 6, by Comrs. Lawrence Co., constructing Bedford and Heltonville Rd., $64,775; also Bedford and Fayetteville Rd., $48,064. J. H. Taylor, Bedford, aud.

Ind., Crawfordsville—July 6, by Comrs. Montgomery Co., grading and paving 24,378 ft. Todd and Miller Rds., $25,262; also 29,050 ft. Lynch and Canine Rds., $26,507, both 30 ft. wide. B. E. May, Crawfordsville, aud.

Ill., Evanston — June 28, by Bd. Local Impvts., concrete paving University Pl., Seward and Park Sts., Prospect and Central Park Aves.; and c.i. mains in Dodge and Barton Aves. $128,000.

Ill., Galesburg — June 29, by Bd. Local Impvts., grading, curbing, guttering and vertical fibre brick on 4 in. concrete surfacing 6,320 sq.yd. North Pearl St. A. L. Richey, City Hall, engr.

Wisconsin—June 29, by State Hy. Comn., at Div. Office 7, Court House, Rhinelander, **(F. A. P. means Federal Aid Project)**, graveling, etc. 11,819 cu.yd. F.A.P. 404-A, Iron Co., and 2,456 cu.yd. F.A.P. 436-A, Oneida Co.; topsoiling, etc. 479 cu.yd. S.A.P. Job 7712, Oneida Co., 1,936 cu.yd. F.A.P. 414-A, Vilas Co., 2,667 cu.yd. F.A.P. 431-A, Lincoln Co., and 3,797 cu.yd. Sta. 24 plus 21 to Sta. 441 plus 32, also concrete, amiesite or warrenite-bitulithic paving, etc. 14,118 sq.yd. F.A.P. 426-A, Florence Co. J. T. Donaghey, Madison, ch. engr.

Wis., Milwaukee—June 28, by Holy Cross Cemetery Assn., J. Fischer, supt., Burleigh and Lisbon Rds., bituminous macadam on waterbound paving, etc., 12,000 sq.yd. driveways. $25,000. Steinhagen & Steinhagen, 845 38th St., engrs.

Wis., Milwaukee—June 26, by Dept. Pub. Wks., R. E. Stoelting, comr., asphalt paving, etc., 12,707 sq.yd. Maryland, Shepherd and Summit Aves. J. Schwada, city engr.

Ia., Carroll — June 28, at office Auditor Carroll Co., improving 7 mi. road, 7,000 cu.yd. gravel and 75,000 units overhaul, etc. J. F. Maher, Carroll, co. engr.

Ia., Keosauqua — June 30, at office Auditor Van Buren Co., improving 14.487 mi. Bonaparte Rd., etc. 243,335 cu.yd. excav., 95,800 cu.yd. overhaul, etc.

Minn., Minneapolis—June 28, by A. P. Erickson, aud. Hennepin Co., grading, etc., Forest Lake Cutoff Rd. between Lowry Ave. and Minneapolis and Minnesota Trunk Highway 1, through New Brighton. $125,000. J. W. Shaffer, Court House, co. surv. Noted June 17.

Minn., Minneapolis — July 19, by A. P. Erickson, aud. Hennepin Co., paving, etc. approximately 18,764 sq.yd. approaches to Mendota Bridge over Mississippi River. $40,000.

Kan., Ft. Scott—July 1, by Clerk Bourbon Co., improving 3.005 mi. Federal Aid Project 339-A, 19,595 cu.yd. earth and 1,023 cu.yd. rock excav., 20,186 lb. reinforcing, etc. H. McCurley, Ft. Scott, engr. Noted Apr. 15.

Kan., Girard—July 2, by Clerk Crawford Co., improving 3.513 mi. Federal Aid Project 347-A, 18,457 cu.yd. excav., 27,597 lb. reinforcing, 7,070 cu.yd. chat surfacing, 11,524 cu.yd. chat surfacing 1 mi. haul, etc. J. H. Ludlow, Girard, co. engr. Noted June 3.

Kan., Garnett—July 3, (extended date) by Clerk Anderson Co., grading 0.173 mi. Federal Aid Project 113-C and one 30 ft. subway span on same. F. T. Bonebrake, Garnett, co. engr. Noted May 13.

Kan., Hutchinson—July 9, by Clerk Reno Co., grading 0.464 mi. Federal Aid Project 232-A, and eight 35 ft., and one 90 ft. span concrete arch bridges on same road. W. A. Staley, Hutchinson, co. engr.

Kan., Hutchinson—See "Bridges."

Kan., Oskaloosa—See "Bridges."

Nebraska—July 1 and 2, by R. L. Cochran, highway engr., State Capitol Bldg., Lincoln, grading, graveling, bridging and paving, etc., 45 projects. $1,000,000.

Neb., Omaha—June 29, by J. P. Hoctor, city clk., paving, etc., 35th, Drexel, Saratoga, 28th, Miami, 49th, 43rd and Pinkley Sts., also alleys in Dists. 2354, 2581, 2927, 2974, 3006, 3011, 3012, 3014, 3028 and 3027. H. E. Cotton, asst. city engr.

N. D., Jamestown—July 1, City, c/o W. O. DuPut, city aud., paving approximately 20 blocks various streets. $75,000. Noted Feb. 18.

Missouri — July 1, by State Hy. Dept., Jefferson City, grading, graveling, etc., 65.891 mi. roads in DeKalb, Dent, Cooper, Camden, Howard, Platte, Putnam, Ripley, Holt, Shannon, Sullivan, Stone, Reynolds, Taney and Wright Counties. B. H. Piepmeier, ch. engr. Noted June 17.

Mo., Kansas City — See "Contracts Awarded."

Mo., St. Louis—July 6, by Bd. Pub. Serv., 208 City Hall, asphalt paving, etc., 2,265 sq.yd. Edwards St., $17,800; asphalt, warrenite or amiesite paving, etc., 23,160 sq.yd. 9th St., $121,200; willite, asphalt paving, etc., 1,710 sq.yd. Lorraine St., $13,200; asphaltic concrete paving, etc., 2,160 sq.yd. Wanda Ave., $12,500; and amiesite paving, etc., 1,310 sq.yd. Adkins St., $11,200, 2,445 sq.yd. Penrod Rd., $17,080, 1,125 sq.yd. 38th St., $7,800, and 1,915 sq.yd. Wyoming St., $13,000. W. W. Horner, 300 City Hall, engr. This corrects report in June 17 issue.

Arkansas—June 29, by State Hy. Dept., Little Rock, **(F. A. P. means Federal Aid Project)**, improving 1.45 mi. Corning-Piggott Rd., F.A.P. 238-A, Clay Co., 5.9 acres clearing and grubbing, 32,044 cu.yd. excav., 2,202 cu.yd. gravel surfacing, 5,557 cu.yd. overhaul, etc. and 9.59 mi. Hope-Lewisville Rd., F.A.P. 216-B, Lafayette Co., 16.48 acres clearing, 17.66 acres grubbing, 55,332 cu.yd. excav., 12,943 ft. treated timber, 16,979 lb. reinforcing, etc.; concrete timber bridge with treated timber approach spans and earth embankment over Ouachita River, near Mt. Ida, F.A.P. 196-A, Montgomery Co., 3,323 cu.yd. earth and rock excav., 19,200 ft. untreated and 17,230 ft. treated timber, 105,000 lb. reinforcing, etc., one 95 ft. arch span and two 30 ft. concrete girder approach spans with embankment, etc. over Caney River at Glenwood, Pike Co., 1,203 cu.yd. earth and rock excav., 28,100 lb. reinforcing, etc., and 1,294 ft. treated timber bridges on Corning-Piggott Rd., F.A.P. 238-A, Clay Co., 198,213 ft. treated timber, 7,364 ft. treated piling, etc. R. C. Limerick, highway engr.

Tex., Anderson—July 1, by R. W. Barry, judge Grimes Co., grading, bridging, etc. 8.8 mi. State Highway 90, State Aid Project 610 D, 26 ft. $73,700. O. A. Seward, Jr., Navasota, engr.

Tex., Carthage—June 29, by H. Moseley, chn. State Hy. Comn., Austin, grading and bridging, etc. 4.105 mi. State Highway 43, Federal Aid Project 481-C, 26 ft. $25,500. D. E. Martin, Carthage, co. engr. Noted May 27.

Tex., Graham — June 29, by State Hy. Comn., Austin, H. Moseley, chn., grading, bridging, etc. 9.75 mi. Highway 67, here, Young Co., 26 ft. $60,000. G. R. Johnston, Graham, engr.

Tex., Hubbard—See "Contracts Awarded."

Tex., Palestine—July 9, by W. C. Quick, judge Anderson Co., constructing graded earth approach to bridge across Trinity River between Anderson and Freestone Counties, 26 ft. $27,500. E. W. Davis, Palestine, co. engr.

Tex., Uvalde — June 29, by H. Moseley, chn. State Hy. Dept., Austin, gravel resurfacing 23.1 mi. Highway 3, 17 ft. $36,000. M. B. Hodges, Uvalde, co. engr.

Oklahoma—June 29, by State Hy. Dept., Oklahoma City, concrete slab surfacing 54,260 sq.yd. Minnehah Rd., State Road 2, Grady Co. $112,000, and 53,720 sq.yd. Rush Springs Rd., State Road 2, $110,000 both Grady Co., 52,800 sq.yd. Holdenville Rd., State Road 3 $66,000 and 31,180 sq.yd. Wetumka Rd., State Road 24, $52,000 both Hughes Co., 34,700 sq.yd. Okmulgee Rd., State Road 19 $60,000, and 34,700 sq.yd. Morris Rd., State Road 19 $61,000 both Okmulgee Co., and 29,219 sq.yd. Federal Aid Project 140-F, Kay Co. $71,000; also asphaltic concrete surfacing 31,160 sq.yd. Harrah Rd., State Road 3, Oklahoma Co., $70,000. J. M. Page, highway engr.

Oklahoma—June 29, by State Hy. Dept., Oklahoma City, **(F. A. P. means Federal Aid Project and S. A. P. means State Aid Project)**, grading, etc., 23 mi. Shawnee-Harrah Rd., F. A. P. 211, Pottawatomie Co., 117,200 cu.yd. earth and 1,600 cu.yd. rock excav., 27.4 tons reinforcing, etc., $70,000, 14 mi. Sayre-Elk City Rd., F. A. P. 212, Beckham Co., 91,400 cu.yd. earth and 3,600 cu.yd. rock excav., 21.2 tons reinforcing, etc., $56,000, 8 mi. Stigler Rd., F. A. P. 196, Haskell Co., 26,600 cu.yd. earth, and 4,700 cu.yd. rock excav., 16.2 tons reinforcing, etc., $30,000, 12 mi. Clavin-Allen Rd., F. A. P. 214, Hughes Co., 77,300 cu.yd. earth and 3,600 cu.yd. rock excav., 16.4 tons reinforcing, etc., $60,000, 10 mi. Calvin Rd., F. A. P. 182, Hughes Co., 113,200 cu.yd. earth and 7,400 cu.yd. rock excav., 14.6 tons reinforcing, etc., $51,000, 12 mi. Blackwell-Kansas State line Rd., F. A. P. 165, Kay Co., 71,300 cu.yd. earth and 1,100 cu.yd. rock excav., 28.4 tons reinforcing, etc., $67,000, 6 mi. Cimarron Rd., F. A. P. 124, Kingfisher Co., 48,200 cu.yd. earth excav., 10.6 tons reinforcing, etc., $25,000, 10 mi. Spiro-Haskell Co. line Rd., F. A. P. 196, Le Flore Co., 34,700 cu.yd. earth and 3,100 cu.yd. rock excav., 20 tons reinforcing, etc., $38,000, 8 mi. Burbank Rd., F. A. P. 153, Osage Co., 47,700 cu.yd. earth and 6,100 cu.yd. rock excav., 19.6 tons reinforcing, etc., $38,000, 2 mi. Yale Rd., F. A. P. 198, Payne Co., 21,200 cu.yd. earth and 1,360 cu.yd. rock excav., 12.4 tons reinforcing, etc., $25,000, 11 mi. Cardell Rd., F. A. P. 226, Washita Co., 81,200 cu.yd. earth and 13,200 cu.yd. rock excav., 12.2 tons reinforcing, etc., $45,000, 8 mi. Comanche Rd., F. A. P. 187, Stephens Co., 47,600 cu.yd. earth and 2,210 cu.yd. rock excav., 20.7 tons reinforcing, etc., $41,000; grading and concrete surfacing 84,200 sq.yd. Shawnee Rd., F. A. P. 222, Pottawatomie Co., $240,000, 12,629 sq.yd. Tonkawa Rd., S. A. P. 280, Kay Co., $37,000, 32,260 sq.yd. concrete, Edmond-Oklahoma Co. line Rd., F. A. P. 137, Oklahoma Co., $78,000, 4 mi. Pawhuska Rd., F. A. P. 152, Osage Co., 42,115 cu.yd. excav., etc., $112,000, 85,210 sq.yd. Claremore Rd., F. A. P. 183, Rogers Co., $216,000. J. M. Page, highway engr.

Okla., Enid—June 26, by R. T. Williams, city clk., grading, curbing and concrete paving 11,480 sq.yd. West Bway. and West Main Sts. $37,250. F. C. McGruder, Enid, engr.

Ore., Portland — June 30, by Comrs. Multnomah Co., Court House, constructing Rock Island Bridge approaches, 5,000 cu.yd. excav., 6,500 sq.yd. sand and gravel fills, 5,825 sq.yd. 6 and 8 in. pavement and 38,700 lb. reinforcing, etc. G. W. Buck, Court House, engr.

Ontario—June 30, by S. L. Squire, deputy minister highways, Dept. Pub. Wks., Toronto, concrete, bituminous macadam paving, grading, etc., various roads. $575,000. R. M. Smith, 110 University Ave., Toronto, ch. engr.

Bids Received

New Hampshire — State Hy. Dept., Concord, June 11, rein.-con. paving 10,400 sq.yd. Highway in Hillsboro and Manches-

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Streets and Roads (Continued)

ter and bituminous macadam paving 8,596 sq.yd. in Grafton and Plymouth, from St. Albans Constr. Co., Portland, Me., $41,181 and $21,820 respectively, engrs. est. $47,000 and $25,000 respectively; also asphalt paving 6,680 sq.yd. and 21 ft. span bridge in Merrimack and Franklin, from Robie Constr. Co., 1037 Elm St., Manchester, $32,086, engrs. est. $41,000. Noted June 10.

New Hampshire—State Hy. Dept., Concord, from St. Albans Constr. Co., Portland, Me., bituminous macadam paving in Ossipee $17,587.

Massachusetts—Dept. Pub. Wks., Boston, bituminous macadam paving 2,100 ft. highway in Enfield, from D. O'Connell Sons, 480 Hampden St., Holyoke $15,229, 5,417 ft. in Winchendon, from C. E. Horne, Millbury $40,792, 5,732 ft. in Middleboro, from Powers Bros., 161 Montello St., Brockton $30,364, 2,950 ft. in Freetown from Canedy Constr. Co., Clifford $20,951, 4,500 ft. in Lakeville, from Z. L. Canedy, Lakeville $19,226, 2,700 ft. in Sharon from Unity Constr. Co., 42 Prospect St., Somerville $13,910, and 5,866 ft. in Stockbridge, from Lane Constr. Co., 37 Colony St., Meriden, Conn. $44,390. Noted June 10.

Mass., Boston—Sheet asphalt or bitulithic paving Tremont St. from Washington St. to Newton Line from H. F. Malley, 174 Hillside Ave., Roxbury, $33,733.

N. Y., Brooklyn — J. A. Guider, pres. Brooklyn Boro., Boro Hall, June 16, from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., sheet asphalt paving Bay Ridge Ave. $6,989, Brooklyn Ave. $4,242, East 31st St. $8,683 and East 35th St. $5,396; from Borough Asphalt Co., 1301 Metropolitan Ave., Atkins Ave. $7,214, Herzel St. $5,435 and Hinsdale St. $4,332, from Sicilian Asphalt Paving Co., 41 Park Row, New York City, Lormier St. $39,733, from Uvalde Asphalt Paving Co., 1 Bway., New York City, Sackman St. $9,582, from B. Turecamo Contg. Co., 8906 Bay 12th St., East 9th St. $7,241, East 13th St. $8,105, and 54th St. $6,737; from M. J. O'Hara, Neptune Ave. and West 19th St., grading and asphalt block paving 41st St. $27,041, and 51st St. $21,685, also asphalt paving 90th St. $2,535; from G. M. Mandato, 129 29th St., grading, curbing and flagging East 13th St. $3,162, 90th St., etc. $809, from R. Lynster, 1364 Sterling Pl., 31st St. $2,985, and from Castle Bros., 54th St., etc., $2,741. Noted June 10.

N. Y., New York — H. Bruckner, pres. Bronx Boro, Crotona Park Rd. and Tremont Aves., sheet asphalt on concrete paving Gun Hill Rd. from White Plains to Eastchester Rds., from Gaffney Constr. Co., 50 East 42nd St., $108,595. Noted June 17.

N. Y., New York — A. Goldman, comr. Plant & Structures, Municipal Bldg., paving and sidewalks easterly end 155th St. viaduct, from P. Cramer, 154 East 50th St., $28,690. Noted June 10.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., June 21, grading, curbing and sheet asphalt paving West 134th St. and Laurel Hill Terrace, from Asphalt Constr. Co., 208 Bway., $15,908 and $20,679 respectively; grading and granite block paving West and Marginal Sts., from W. J. Fitzgerald, Inc., 547 West 45th St., $600,831; laying sidewalks when and where directed during 1926, from J. L. Brennan, 839 Grand Ave., $5,416. Noted June 17.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., June 16, grading and sheet asphalt repaving Madison Ave., from Cleveland Trinidad Paving Co., Flushing, $59,531; widening and sheet asphalt repaving 5th Ave., from Uvalde Asphalt Paving Co., 1 Bway., $227,315; grading and asphalt block repaving Bethune St., from J. Meehan & Son, West St. Bldg., $8,502. Noted June 10.

N. Y., New York — Park Bd., Arsenal Bldg., Central Park, June 15, permanent walks in Crotona and Claremont Parks, Bronx Boro, from Valatia Constr. Co., 15 East 40th St., $34,990.

New Jersey—State Hy. Comn., Trenton, June 21, widening Whitehorse Pike, Route 3, Sect. 11-A, Berlin to Hammonton, Camden Co., from M. Staub, Pitman, $303,840. Noted June 3.

Pa., Phila.—Dept. Pub. Wks., Bureau of Highways, June 17, from E. Garlick, Sr., 2948 East Venango St., grading Almond St. $996, from E. A. Mullen, Inc., 5512 Vine St., Folsom St. $568, and Yocum St. $1,276, from T. H. Neely, 27th and Ritner Sts., Hutchinson, Marshall, Percy and Sheridan Sts. $2,930, from F. Mark Constr. Co., North Winghocking St., 4th St. $981; from Barber Asphalt Co., 239 North 30th St., asphalt paving (assessment work), Ditman St. $4,485, Glenmore St. $4,183, Kenmore Rd. $4,644, Vankirk St. $18,386, Worth St. $2,205, from Mack Paving & Constr. Co., Nicetown Lane and Luzerne St., Summerdale St. 26,651, from Union Paving Co., 8 South 21st St., 10th St. $4,045, and from Eastern Asphalt Co., Penn. Bldg., 66th St. $6,183; from Curtis Bros., State and Unruh Rds., improving Bingham, Lawndale, Levick, Magee, Passmore and Tyson country roads (a) $42,469 (b) $38,549, Prospect St. $4,143, and Shelbourne St. $2,751, from Mazzola & Marano, 739 South 7th St., Claridge, Dalton, Ferndale, Hoffnagle, Oakmont, Solly and Stanwood Rds. (a) $28,693 (b) $26,086, from M. Y. Neely, Inc., Oxford Ave. and Wakeling Ave., Fuller Rd. (a) $7,912 (b) $7,600, from A. J. Henderson, 825 East Washington Lane, Hermitage and Rector Rds. $2,490; from J. B. McHugh, Jr., 892 North Markoe St., erecting steel smoke shield on 34th St. Bridge 257 over Pennsylvania R.R. tracks, $2,915; from Mundy Paving & Constr. Co., 226 South Warnock St., replacing wooden trusses with steel beams in Penrose Ferry Bridge 10, over Schuylkill River, $1,753.

Ohio—G. F. Schlesinger, dir. Highways & Pub. Wks., Columbus, cancelled bids to have been opened June 11, grading and paving, etc., 5.345 mi. Sect. "A" Cleveland-Sandusky Rd., Cuyahoga Co., and 6.881 mi. Sect. "C" Delphos-Upper Sandusky Rd., Hancock Co.; surfacing 8.82 mi. Sects. "C" and "D" Cincinnati-Chillicothe Rd., Clinton Co., and 3.5 mi. Sects. "A" and "C" Painesville-Warren Rd., Lake Co.; concrete widening 6.618 mi. Sect. "O-1" Cincinnati-Dayton Rd. and others Montgomery Co., and 2.604 mi. Sect. "D" Dayton-Chillicothe Rd., Montgomery Co.; grading and bituminous concrete on concrete paving, etc., 0.937 mi. Sect. "1" Mansfield-Mt. Gilead Rd., Richland Co. Noted June 10.

O., Akron—W. F. Peters, dir. Pub. Serv., **(e. e. means engineers estimate)**, from McCourt Constr. Co., 369 South Main St., grading, curbing and vitr. brick paving, etc., 5,900 sq.yd. Peerless Ave., $36,754 e. e. $50,500, 6,925 sq.yd. Packard Dr., $40,252 e. e. $56,700, 5,680 sq.yd. Orlando Ave., $37,150 e. e. $48,900; from Shullo & De Luca Constr. Co., 140 North Summit St., 645 sq.yd. Hillside Terrace, asphalt $3,498, brick $3,768 e. e. $4,200, 1,185 sq.yd. Whitney Ave., asphalt $6,980, brick $7,604 e. e. $8,300; from H. G. Baltes, 883 Bloomfield Ave., curbing, concrete guttering, cindering 950 cu.yd. Laffer Ave., $10,674 e. e. $12,700. Noted May 13.

O., Cincinnati—Director Pub. Serv., June 1, curbing, guttering, sidewalks and concrete repaving, etc. 25,500 sq.yd. Kellogg Ave., from Biegler Bros., Middletown, $114,759 engrs. est. $142,664; also 17,000 sq.yd. Madison Ave., from Andrew Asphalt Co., 717 Rentschler Bldg., Hamilton, $55,771 engrs. est. $63,060. Noted Apr. 29.

Illinois—State Dept. Pub. Wks. & Buildings, Div. Highways, Springfield, June 9, concrete surfacing 0.86 mi. Route 7, Sect. 30-X, 18 ft., La Salle Co., from S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, Minn., $17,857, 5.05 mi. Route 7, Sect. 31, 18 ft., La Salle Co., from Central Eng. Co., 809 Putnam Bldg., Davenport, Ia., $105,725, 1.67 mi. Route 4, Sect. 63, 24 ft., St. Clair and Madison Counties, and 2.62 mi. Route 13, Sect. 29, 18 and 20 ft., St. Clair Co., from Hoeffken Bros., Belleville, $49,500 and $61,093 respectively, 2.27 mi. Route 8, Sects. 50 and 51, 20 and 4 ft., Tazewell Co., from Hartman-Clark Bros. Co., Peoria, $41,000, 1.22 mi. Route 23, Sect. 5, 18 ft., La Salle Co., from Keokuk Quarry & Constr. Co., Keokuk, Ia., $23,538; concrete surfacing 7.19 mi. and gravel surfacing 0.21 mi. Route 7, Sect. 30, La Salle Co., from Duncan Constr. Co., La Salle, $138,265; grading 6.15 mi. Route 13, Sect. 28-A, St. Clair Co., 118,966 cu.yd. excav., etc., from Tripp Bros., Belleville, $51,892, 1.06 mi. Route 7, Sect. E, La Salle Co., 24,885 cu.yd. excav., etc., from E. L. Tegge Constr. Co., Papineau, $12,692, and 2.17 mi. Route 14, Sect. 12-X, White Co., 23,651 cu.yd. excav., etc., from M. E. Leffler, Benton, $16,412. Noted May 27.

Ill., East St. Louis — For 8 in. concrete paving 5,340 sq.yd. 42nd St., from Moore Bros., 925 North 8th St., $22,584; curbing and 8 in. concrete surfacing 8,720 sq.yd. 38th St., from L. Rich Constr. Co., Arcade Bldg., $42,311. Noted Feb. 25.

Wis., Fond du Lac — J. Hohensee, city clk., June 3, paving approximately 55,000 sq.yd. various streets, from Ford Paving Co., Cedar Rapids, Ia., rein.-con. at $2.68 per sq.yd., vibrolithic concrete $3.08, sheet asphalt $2.89, asphaltic concrete $2.49, and asphaltic concrete, on Trinidad paving $2.59. Noted May 27.

Wis., Milwaukee—Dept. Pub. Wks., R. E. Stoelting, comr., June 7, asphalt resurfacing, etc., Becher St., 6th, Windlake and 2nd Aves., from White Constr. Co., 69 Wisconsin St., $31,734; and 27th St., from Badger Constr. Co., 97 Wisconsin St., $15,225. Noted June 3.

Wis., Milwaukee—Dept. Pub. Wks., R. E. Stoelting, comr., June 10, 14,435 ft. 6- to 16-in. c.i. mains in various streets, from Wenzel & Henoch Constr. Co., 498 27th St., $15,545.

Wis., Milwaukee—Dept. Pub. Wks., R. E. Stoelting, comr., June 11, 6,166 ft. 6- to 54-in. mains in Burleigh and 53rd Sts., from G. F. Zimmermann, 3402 Grand Ave., $61,107.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, June 15, granite block paving, etc., 1,340 sq.yd. Arlington Ave., from Eyermann Constr. Co., 1216 South Grand Blvd., $14,146; recut granite block paving, etc., 17,950 sq.yd. Cass Ave. from Skrainka Constr. Co., Security Bldg., $106,136; shallow granite block paving, etc., 18,530 sq.yd. Cass Ave., from Perkinson Bros. Constr. Co., 3237 Carter Ave., $132,611; and warrenite bitulithic paving 18,000 sq.yd. West Florissant St., from Granite Bituminous Paving Co., Ry. Exch. Bldg., $99,179. Noted May 20.

Tex., Houston—Paving Dowling St. from Elgin to Southmore Aves., from Gulf Bitulithic Co., 801 Bankers Mortgage Bldg., $116,611.

California—State Hy. Dept., Sacramento, June 7, gravel or decomposed granite surfacing roadway between Brawley and Westmoreland, from S. C. Peyton, Norwalk, $93,641 and $100,291 respectively. Noted May 27.

Calif., Los Angeles—Bd. Pub. Wks., from G. H. Oswald, 366 East 58th St., improving portion 59th St., grading $4,250, 193,707 sq.ft. 6 in. concrete paving $0.188 per sq.ft., etc., total $43,047. Noted June 17.

Calif., Los Angeles — City, from Curtis Paving Co., 2440 East 26th St., improving Alcott St., grading $2,000, 94,084 sq.ft. 6 in. concrete paving at $0.20 per sq.ft., etc., total $31,229; from W. Liddington, 420 East 60th St., Manchester Ave., grading $5,000, 170,493 sq.ft. 7 in. concrete paving $0.209 per sq.ft., etc., total $43,370. Noted June 10.

Calif., North Sacramento—Trustees, June 7, 5 in. asphalt paving 6,000 ft. Del Paso Blvd., from Clark & Henery Constr. Co., Chancery Bldg., San Francisco, $56,068. Noted May 27.

Calif., Oroville—C. F. Belding, clk., June 7, improving Oroville-Wyandotte Rd. from Garden Ranch and Wyandotte, from T. H. and M. C. Polk, Chico, $25,443. Noted May 27.

Calif., Oxnard — From Fleming Constr. Co., 105 North Park Ave., Pomona, improving various streets, 198,000 sq.ft. paving, 4 in. $0.15 per ft., 5 in. $0.175, and 6 in. $0.195, total approximately $56,465. Noted June 17.

Contracts Awarded

Massachusetts—Dept. Pub. Wks., Boston, bituminous macadam paving 4,000 ft. highway in Newbury, to Welch & Moynihan, 15 Front St., Salem, $10,986, 26,670 ft. in Goshen and Williamsburg, to Lane Constr. Corp., 37 Colony St., Meriden, Conn., $261,710, 26,033 ft. in Paxton and Worcester, to D'Onfro Bros., Inc., 712 Main St., Leominster, $240,044; and rein.-con. paving 3,400 ft. in Plainville, to F. P. Manning, 27 Coral St., Fall River, $39,111. Grand total $551,851. Noted June 10.

Massachusetts—Metropolitan Dist. Com., 1 Ashburton Pl., Boston, grading, surfacing, etc., Lechmere Sq. in Cambridge and Somerville, to Coleman Bros., 245 State St., Boston, $287,523.

Massachusetts—Dept. Pub. Wks., Boston, bituminous macadam paving 10,100 ft. highway in Barnstable, to Lane Constr. Corp., 37 Colony St., Meriden, Conn., $48,354, 3,540 ft. in Westborough, to H. and J. P. Green Co., 220 Holden St., Worcester, $21,008, 10,700 ft. in Belmont, to Lawton Constr. Co., Providence, R. I., $75,874, 8,100 ft. in Stow, and 3,800 ft. in Ashburnham, to J. P. Keating, Fitchburg, $42,822 and $25,629 respectively; gravel surfacing 699 ft. in New Ashford, to C. B. Lindholm, 24 North St., Pittsfield, $6,776; hard paving 4,200 ft. in Savoy, to Warner Bros., Sunderland, $16,777. Grand total $237,240. Noted June 17.

Massachusetts—State Hy. Dept., Boston, bituminous macadam paving 22,161 ft. highway in Chelmsford and Westford, to A. Pollatto, Dracut, $175,923; and rein.-con. paving 10,116 ft. in Methuen, to P. J. Holland, Lawrence, $91,822. Noted June 10.

Conn., Hartford—Sheet asphalt on concrete paving 46,900 sq.yd. Asylum, Blue Hill and New Britain Aves., to Edward Balf Co., 14 Haynes St. Engrs. est. $60,000.

Conn., Meriden — Sheet asphalt on macadam paving 2 mi. Camp and Liberty Sts., Bunker and Sherman Aves., to

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Streets and Roads (Continued)

Robison & Powers, Inc., 35 Colony St., $76,955. Engrs. est. $75,000.

New York—A. W. Brandt, comr. Highways, Albany, **(e. e. means engineers estimate)**, constructing and reconstructing 4.44 mi. Highway 1734, Newark-Sodus Rd., Part 3, and 4.5 mi. Repair Contr. 1525, Highway 5378, Ontario Center-Williamson Rd., both Wayne Co., to J. W. Gurnett, Watkins, $200,741 and $156,411 respectively, e. e. $265,241 and $195,249 respectively; 5.31 mi. Repair Contr. 1519, Highways 5234, Liberty-County Line Part 2, and 5340 East Branch-Sullivan Co. Line highways, Delaware and Sullivan counties, to J. Arborio, 59 Center St., New Haven, Conn., $291,926, e. e. $339,998; 5.62 mi. Repair Contr. 1510, Highway 5335, Watkins Village-Franklin St., Highway 5334, Watkins-Yates Co. line Rd., and Highway 5018, North Reading-Dundee Rd., Part 1, to Rochester Vulcanite Paving Co., Rochester, $227,137, e. e. $280,666; 4.73 mi. Highway 8251, Cazenovia-Chittenango Rd., Madison Co., to Scott Bros. Constr. Co., Inc., 117 North Washington St., Rome, $323,762, e. e. $432,707; 6.12 mi. Highway 8249, West Eton-Pecksport Rd., Madison Co., to J. F. Paddelford, Sherburne, $291,530, e. e. $394,-016; 5.4 mi. Repair Contr. 1504, Highway 398, County Line Rd., Orleans and Monroe Counties, to H. W. Patterson, Hornell, $169,582, e. e. $222,433; 9.68 mi. Highway 8252, Conewango Valley-Balcom Highway, Chautauqua Co., to Constantine Constr. Co., 7 Exchange St., Buffalo, $431,948, e. e. $580,683; 6.48 mi. Highway 8132, Whitehall-Dresden Rd., Part 2, and Dresden Center Dresden Rd., Washington Co., to P. H. Murray, 2226 15th St., Troy, $105,306, e. e. $146,567. Grand total $2,198,343. Noted June 3.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, sidewalks, and permanent sheet asphalt on concrete paving Liberty Ave. to Brooklyn Boro line to 88th St. (Boyd Ave.), to Cleveland Trinidad Paving Co., Flushing, $69,408; and Liberty Ave. from 88th St. to Rockaway Blvd., to Highway Impvt. & Repair Co., Church St., New York City, $43,463. Noted June 17.

New Jersey—State Hy. Comn., Trenton, grading and rein.-con. paving 5 mi. Route 20, Millville to Vineland, Cumberland Co., to E. H. Ellis, 6017 Christian St., Phila., Pa., $205,015. Noted June 17.

New Jersey—Bd. Freeholders Ocean Co., Toms River, rein.-con. paving 25,800 sq.yd. Washington St., Dover, and 14,550 sq.yd. Central Ave., Lakewood, to S. S. Thompson Co., Herbert St., Red Bank, $100,454 and $53,964 respectively. Noted May 20.

N. J., Freehold—Monmouth Co., sheet asphalt paving 35,482 sq.yd. Red Bank-Fair Haven Rd. through Rumson, to Municipal Constr. Co., Utica City Natl. Bank Bldg., Utica, N. Y. $34,189. Noted May 27.

N. J., Westwood—Mayor and Boro Council, Center St. Firehouse, paving and curbing Lexington Ave., to Abbate & Buniva, Tenafly, $14,963; and paving 4th Ave. to Taveniere & Johnson, Closter. Noted June 10.

Pennsylvania—State Hy. Dept., Harrisburg, **(R. means Route and A. means Application)** rein.-con. paving, etc., 26,300 sq.yd. R.449, York Co., to Continental Contg. Co., Knickerbocker Bldg., Baltimore, Md. $107,-721; 31,655 sq.yd. R.234, Cambria Co., to E. H. Brua, Hollidaysburg $129,940, 39,003 sq.yd. A.3001 and 3825, Chester Co., to G. I. Thompson, Clearfield $143,350, 4,900 sq.yd. Rs.182 and 240, Montour Co., to Reitz Bros., Sunbury $34,589, 7,600 sq.yd. R.296, Susquehanna Co., to J. Booth, Carbondale $40,218, 27,088 sq.yd. R.296, A.4000, Susquehanna Co., to Freland Constr. Co., Hazelton $116,664, 18,222 sq.yd. R.129, Dauphin Co., to Swanger Factler Constr. Co., Lebanon $88,089, 46,067 sq.yd. R.214 Clarion Co., to W. C. Quick & Co., Brookville $176,545, 48,300 sq.yd. R.181, A.3729, Westmoreland Co., to Georges Constr. Co., Uniontown $194,408, 4,738 sq.yd. A.3995, Tioga Co., to Montour Constr. Co., Montoursville $21,-613, and 40,281 sq.yd. R.522, Franklin Co., to Britti & Lozzi, Hagerstown $154,879, also grading, etc. 51,725 ft. R.105, Cameron and Clinton Counties, to W. C. Guncheon & Co., Harrisburg $192,926, 32,713 ft. A.3587 Berks Co., to S. J. Groves & Sons Co., Duncannon $76,787, and 11,466 ft. R.33, Mifflin Co., to Shamrock Constr., Co., Shamokin $108,437. Grand total $1,586,166. Noted Mar. 4.

Pennsylvania—State Hy. Dept., Harrisburg, **(R. means Route and A. means Application)**, rein.-con. paving 43,624 sq.yd. R. 260-537, Blair Co., to Miller Contr. Co., Punxsutawney, $199,052; 56,192 sq.yd. R. 538, Sect. 2, Beaver Co., to H. E. Bunce, Olean, N. Y., $284,513; 46,001 sq.yd. A. 2842-2588, Northampton Co., to Souder Constr. Co., Lancaster, $163,967, 38,141 sq. yd. R. 337, A. 3700-3915, Indiana Co., to F. D. Rosa, Bradford, $159,353; and 66,113 sq.yd. R. 538, Sect. 1, Allegheny Co., to J. L. Plummer, Inc., Johnstown, $425,998. Grand total $1,232,883. Noted May 20.

Pa., Greensburg — W. A. Arter, controller Westmoreland Co., 18 ft. rein.-con. repaving, etc., approximately 12,255 ft. Pricedale Rd., to Donora Constr. Co., Donora, $123,239. Noted May 20.

Md., Baltimore—Bd. Awards, sheet asphalt paving 22,000 sq.yd. Contr. 341, to Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $83,216; and concrete paving 11,000 sq.yd. Contr. 342, to Arundel Constr. Co., Knickerbocker Bldg., $29,290.

Virginia — State Hy. Comn., Richmond, improving 4.076 mi. road, incl. bridge over Warwick Swamp near Petersburg, to Roberts Paving Co., Salisbury, Md., $129,-221; concrete surfacing 3.935 mi. road in Prince William Co., to J. H. Montague, Sanderson, $157,190, 3.83 mi. Route 31, Dinwiddie Co., to Weinbrunn & Carpenter, Richmond, $119,543; widening 14.79 mi. concrete road between Virginia Beach and Norfolk, to Hudson & Scruggs, Wilmington, N. C., $127,058; and bituminous macadam surfacing 4.01 mi. road in Allegheny Co., to Moore & Lesley, Staunton, $119,216. Grand total $652,278. Noted May 20.

O., Akron—Summit Co., grading, bridging and rein.con. paving 36,800 sq.yd. South Main St., to McCourt Constr. Co., 369 South Main St., $121,551. Engrs. est. $154,000. Noted June 10.

O., Chesapeake—Brick paving 9,000 sq. yd. 2nd Ave., 1st, 2nd, 3rd, 4th, and 5th Sts., to T. C. Cloran, Ironton, $29,250. Noted Mar. 4.

O., Cleveland—City, to Cleveland Trinidad Paving Co., The Arcade, grading, curbing and vitr. brick paving East 172nd St. $22,880, asphalt paving Albers Ave. $9,547, and Benwood Ave. $22,055, to Rieley Bros., 407 The Arcade, East 22nd St. $6,835; to Gould & Maybach, 16311 Saranec Rd., East 171st St. $17,460, and brick paving Linn Dr. $4,544, to H. G. Herring, Wayside Rd., Wemple Rd. $3,126, to Baldwin Bros., 4500 Euclid Ave., Canova Ave. $9,641, and concrete paving Havel Ave. $3,422. Grand total $99,510. Noted June 10.

O., Cleveland — Concrete paving, etc., Avery Ave., to Enterprise Paving & Constr. Co., 8444 Bway. $4,586, and Leroy Ave., to Bentley Bros., Hanna Bldg., $2,686; also asphalt paving Grovewood Ave., to Gould & Maybach, 16311 Saranec Rd., $37,932. Work involves 5,730 lin.ft. stone curbing, 7,000 cu.yd. earth excav., 7,860 sq.yd. sheet asphalt, and 1,380 sq.yd. concrete paving, etc. Grand total $45,204.

O., Cleveland—Improving with **(a)** brick **(b)** asphalt Geraldine Ave. (2) Gedeon Ave. (3) Milford Ave. (4) Sacramento Ave. (5) West 33rd St. (6) West 120th St. (1 to 6 inclusive), involves 5,790 lin.ft. stone curbing, 4,950 cu.yd. earth excav., 9,310 sq.yd. paving, etc. (7) Westdale Ave. (8) Elmwood Ave. (9) Normandy Ave. (10) East 175th St. (11) East 121st St. (7 to 11 inclusive), involves 5,410 sq.yd. paving, 8,300 cu.yd. earth excav. to Roehl Bros. Paving & Constr. Co., 7002 Denison Ave. **(a1)** $12,074 **(a2)** $4,567 **(a3)** $2,532 **(a4)** $9,373 **(a5)** $2,299 **(a6)** $19,355; to Cleveland Trinidad Paving Co., The Arcade **(a8)** $17,365 **(a9)** $15,761 **(b7)** $17,384 **(b10)** $12,538 **(b11)** $11,152. Grand total $124,400.

O., Cleveland—Comrs. Cuyahoga Co., resurfacing North Ridge Rd., to Highway Constr. Co., Guarantee Title Bldg., $68,625. Engrs. est. $107,400.

O., Dayton—G. F. Baker, dir. Pub. Serv., brick paving, etc. 5th St., to Hoolihan & Wangler, 1414 Riverview Ave., $94,120; Washington St., to J. Heier, 415 Hopeland St., $64,662; and Findlay St., to Wright Bros., 1219 Huffman Ave., $39,422. Grand total $198,164. Noted June 3.

Indiana—J. D. Williams, dir. State Hy. Comn., Indianapolis, **(S. R. means State Road and e. e. means engineers estimate)**, concrete paving, etc., 20.283 mi. S. R. 1, Miami and Fulton Counties, to Wabash Constr. Co., Vincennes, $346,048 e. e. $414,-486; 17.878 mi. S. R. 1, Fulton and Marshall Counties, to G. T. Miller, Lebanon, $297,600 e. e. $337,288; 10.637 mi. S. R. 11, Huntington Co., to Tri-Lake Constr. Co., Columbia City, $219,119 e. e. $241,214; 10.608 mi. S. R. 8, Lake and Porter Counties, to Indiana Road Paving Co., Rochester, $184,411 e. e. $235,907; 9.585 mi. S. R. 25, Steuben Co., to J. E. O'Conner & Sons, Ft. Wayne, $184,891 e. e. $210,886; 9.244 mi. S. R. 10, Benton Co., to Western State Paving Co., Davenport, Ia., $151,911 e. e. $188,105; 8.078 mi. S. R. 10, Vigo and Parke Counties, to J. F. Kelly & Co., 300½ South 4th St., Terre Haute, $128,-225 e. e. $162,277; 10.558 mi. S. R. 7, Knox Co., to Lanahans & Konon, Vincennes, $159,114 e. e. $204,188; 10.622 mi. S. R. 11, Grant and Huntington Counties, and 8.335 mi. S. R. 7, Huntington Co., to Cunningham Constr. Co., 1801 Kentucky Ave., $193,987 and $152,975 respectively, e. e. $228,648 and $181,424 respectively; grading and structures on 4.582 mi. S. R. 16, Spencer Co., to J. C. Ellis, Rockport, $44,-621 e. e. $63,366; and 4.659 mi. S. R. 16, Spencer Co., to Gogol & Dounhauer, Mariah Hill, $35,910 e. e. $54,118. Grand total $2,-098,812. Noted Apr. 1.

Mich., Detroit—To M. R. Hanna Co., 2700 Six Mile Rd., 3½ in. sheet asphalt on 8 in. concrete paving 5,800 sq.yd. Greenlawn Ave. $23,759, 6,630 sq.yd. Mendota Ave. $26,253, 3,750 sq.yd. Manor Ave. $15,416, and 3,700 sq.yd. Robson Ave. $14,790, to Detroit Asphalt Paving Co., 909 Transportation Bldg., 1,090 sq.yd. Cristiancy St. $5,345, 6,840 sq.yd. Traverse Ave. $26,785, 3,659 sq.yd. Caniff Ave. $14,343, 11,000 sq. yd. Jerome Ave. $42,099, 5,030 sq.yd. Violetlawn Ave. $21,019, 7,930 sq.yd. Manor Ave. $31,196, 2,253 sq.yd. Lyman Pl. $10,060, and 15,500 sq.yd. Oakman Blvd. $59,394. Grand total $290,460.

Ill., Anna—Grading, curbing, and concrete paving Dists. 6 and 7, to W. C. Johnson, Twenhoefel Bldg., Belleville, $31,350 and $26,784 respectively. Noted May 27.

Ill., Chicago—Bd. Local Impvts., Room 207, City Hall, 6 ft. concrete sidewalks on both sides South Lincoln St. from West 79th to West 83rd Sts., Forest Glen Ave. from Caldwell Ave. to South Branch Chicago River, Chappel Ave. from East 73rd to East 74th Sts., North Side East 64th St. from Kimbark to Greenwood Aves., to Simpson Constr. Co., 133 West Washington St.; on West side Torrence Ave. from East 117th to East 124th Sts., on both sides Colfax Ave. from East 93rd to East 95th Sts., on East 104th Pl. from Corliss to Cottage Grove Aves. on East side South Robey St. from West 37th St. to West Pershing Rd., on West side South Richmond St. from West 57th to West 58th Sts., to G. Kehl Sons, 1225 North Maplewood Ave.; on both sides Altgood St. from North Keeler to North Tripp Aves., on south side Cortez St. from Kostner to North Kilbourne Aves., on south side Homer St. from North Leamington to North Laramie Aves., on east side Laporte St. from Dickens to Armitage Aves., on east side North Laramie Ave. from alley to Fullerton Ave., on west side North Luna Ave. from Lawrence Ave. to Giddings St., on both sides Leclaire Ave. from Avondale to Wilson Aves., on east side North Laramie Ave. from Roscoe St. to Belmont Ave., on west side North Laramie Ave. from Giddings St. to Milwaukee Ave., and on west side North Harlem Ave. from Pratt Ave. to Northwest Highway, to Siewert Callsen Co., 3865 Milwaukee Ave.; on west side Avenue F. from East 103rd to East 105th Sts., to Hanson Constr. Co.; on both sides Chauncey Ave. from 93rd to 94th Sts., on west side California Ave. from West 57th to West 58th Sts., on south side East 82nd St., 264 ft. to Ellis Ave. and on both sides East 78th St. from Clyde to Jeffery Aves., to Superior Constr. Co., 1105 East 52nd St.; on West side Euclid Ave. from East 81st St. to South Chicago Ave., to James Galvin; on both sides South Francisco Ave. from West 57th to West 58th Sts., on east side North Kilpatrick Ave. from Fulton to Walnut Sts., on both sides East 99th St. from Commercial to Escanaba Aves., on both sides West 77th St. from Loomis St. to South Ashland Ave., and on both sides Paul Ave. from Leclare to North Laramie Aves., to Brunckhorst Constr. Co., 384 North Harding St.; on both sides North Latrobe St. from Fullerton to West Grand Aves., on North side West 72nd St. from South Lincoln to South Robey Sts., and both sides West 59th St. 1,252 ft. to South Robey St., to Aldrich Constr. Co., 140 South Dearborn St.; on both sides South Michigan Ave. from East 124th to East 127th Sts., on West 98th St. from Longwood Dr. to South Robey St., on East 110th St. from Vernon to South Park Aves., on South Paulina St. from West 90th to West 91st Sts., on East 77th Sts. from Constance to East End Aves., on east side South State St. from East 121st to East 123rd Sts., and on south side East 124th St. from Indiana to South Michigan Aves., to H. Johnson & Co., 430 West 111th St., on both sides Seneca St. from East Walton to East Pearson Sts., to C. Schroeder & Son Co., 3440 Jansen Ave. Noted May 20.

Ill., Depue—Bd. Local Impvts., at office C. E. Pope, city clk., grading, curbing 15,-150 sq.yd. various streets, to Trompeter & Sons, Peru, $46,600. Noted May 27.

Ill., Mount Carmel — Grading, curbing and concrete paving 12 blocks 1st and Walnut Sts., to H. A. Kribs, Edwardsville. Noted Apr. 15.

Wis., Milwaukee—Dept. Pub. Wks., R. E. Stoelting, comr., asphalt repaving Auer Ave., to White Constr. Co., 68 Wisconsin

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Streets and Roads (Continued)

St. $5,682; also Galena St. and Keefe Ave., to Badger Constr. Co., 97 Wisconsin St., $10,974 and $25,253 respectively. Grand total $41,919.

Ia., Des Moines—To Wright Constr. Co., 1325 Main St., concrete surfacing 5,047 sq.yd. Southwest 12th and 13th Sts. at $2.18 per sq.yd., 19,944 sq.yd. 38th St. and in Chautauqua Park addition $2.17, brick paving 1,430 sq.yd. Center St. $3.04, and 2,580 sq.yd. 4th St. $3.38; to Union Constr. Co., 200 New York Ave., concrete paving 2,719 sq.yd. East 24th St. $2.18, to Des Moines Asphalt Paving Co., 2nd and New York Sts., 1,022 sq.yd. East 8th St. $2.12, 1,462 sq.yd. Allison St. $2.16 1,699 sq.yd. Hayes St. $2.16, 2,545 sq.yd. Edwards Ave. $2.22, 3,301 sq.yd. 40th St. $2.20, 10,645 sq.yd. 14th, School, West 16th and Linn Sts., North and South Alleys $2.15, 3,632 sq.yd. 40th Pl. $2.19, brick paving 3,157 sq.yd. 8th St. $3.26, 1,958 sq.yd. Murphy St. $3.39, sheet asphalt paving 416 sq.yd. Goddard Court $2.56 and grading 5,164 cu.yd. in Chautauqua Park addition $0.65.

Ia., Ft. Madison—Lee Co., to Cameron-Joyce Co., Keokuk, widening, resurfacing, etc., 1.4 mi. Keokuk-Montrose River Rd., 3,800 cu.yd. stone at $1.70 per cu.yd., 450 cu.yd. screening $1.25 and 150 cu.yd. chips $1.80. Noted Apr. 15.

Minnesota — State Hy. Dept., St. Paul, **(S. P. means State Project)**, grading, etc., 91,000 cu.yd. S. A. P. 8-33, F. A. P. 276, to Nelson, Mullen & Nelson, 355 Temple Court, Minneapolis, $32,507; and graveling 38,400 cu.yd. S. P. 6-40, Sect. 1, to S. J. Reader, 209 Kasota Bldg., Minneapolis, $23,843. Noted June 10.

Minn., St. Paul—G. J. Ries, aud. Ramsey Co., improving Capitol Highway between Rich Valley and Minnesota Trunk Highway 50, Divs. A and B, 62,000 cu.yd. excav., 211,000 cu.yd. overhaul, 1,100 cu.yd. special excav., and 12,000 cu.yd. graveling, to W. M. Swan Co., 67 Builders Exch. Bldg., $30,075 and $10,948 respectively. Noted May 20.

Kan., Medicine Lodge—Barber Co., sand clay surfacing 4.172 mi. Federal Aid Project 333-B, to Shultz Constr. Co., Pittsburg, $28,110; six 30 ft. span deck girder bridges, to E. E. Rhodenbaugh, Hazeltown, $12,679.

Neb., Falls City—M. F. Naylor, city clk., National Lake asphaltic concrete paving 43,774 sq.yd. various streets, to Monarch Eng. Co., Falls City, $130,628. Noted June 10.

Neb., Grand Island—Asphaltic concrete paving, etc. 12,788 sq.yd. streets in Dists. 59 and 64, to Trail Paving Co., Grand Island, at $2.39 per sq.yd.

S. D., Aberdeen — Reinforced vibrolithic concrete paving, etc., approximately 15 blocks various streets, to Booth & Olson, 120 Virginia St., Sioux City, Ia., $68,313. Noted June 3.

North Dakota — State Hy. Dept. and Comrs. LaMoure Co., at Court House, La Moure, grading 64,935 cu.yd. Federal Aid Project 298-A, to J. Herr, Jr., Ashley, $29,013. Noted Apr. 29.

Wyoming—State Hy. Comrs., Cheyenne, **(F. A. P. means Federal Aid Project)**, grading 4.146 mi. F.A.P. 161-B, Big Horn Co., to Basin Constr. Co., Basin, $22,937, 7.4 mi. F.A.P. 188 Lincoln Co., to Taggart Constr. Co., Cody, $51,112; and 6.148 mi. F.A.P. 189-A, Johnson Co., and 9 log bridges on 15 mi. F.A.P. 187, Weston Co., to Bagley Bros., Wheatland, $18,517, and $35,-884 respectively; also constructing bridge on F.A.P. 189-A, to W. P. Roscoe, Billings, Mont. $14,742. Grand total $143,192. Noted May 27.

Mo., Joplin — M. E. Fones, city clk., amiesite paving, etc., 11,850 sq.yd. Virginia Ave., to Independent Gravel Co., 214 West 4th St., $17,775; warrenite bituminous paving 19,140 sq.yd. Pennsylvania Ave., to Granite Bituminous Paving Co., Ry. Exch. Bldg., St. Louis, $37,897; also grading and macadam paving 3 blocks Park Ave., to DuBois & Co., Pittsburgh, Kan., $2,733. Grand total $58,405.

Mo., Kansas City—Bituminous macadam paving, etc. 20,300 sq.yd. Gladstone Blvd. between Van Blunt and Belmont Sts., to Hoover Bros. Constr. Co., 1300 East 18th St., at $2.37 per sq.yd.

Mo., Kansas City — Jackson Co. will improve 85th St. and various roads by day labor. $96,825. L. Koehler, Kansas City, engr. Noted Apr. 1.

Mo., Kansas City — L. E. Koehler, engr. Jackson Co., Court House, to Halpin & Boyle, 19th and Main Sts., improving Leed Rd., 12,788 cu.yd. earth excav. at $0.50 per cu.yd., 20,320 sq.yd. concrete paving $2.18, etc., total $50,947. Noted May 20.

Mo., St. Louis—Dept. Pub. Serv., 208 City Hall, **(e e means engineer's estimate)**, to Perkinson Bros. Constr. Co., 3237 Carter Ave., concrete paving, etc., 4,435 sq.yd. Lowell St., $23,473 e. e. $23,900; to Bridges Asphalt Paving Co., Buder Bldg., asphaltic concrete paving, etc., 1,085 sq.yd. Art Hill Pl., $7,326 e. e. $9,360, 1,255 sq.yd. Frieda Ave., $6,780 e. e. $8,400, 2,000 sq.yd. Hoffman St., $9,161 e. e. 11,150, Hoffman St. between Watson Rd. and Clifton Ave., 3,674 e. e. $4,500, 1,865 sq.yd. Nicholson Pl., $9,105 e. e. $11,500, 1,155 sq.yd. Winnebago St., $7,958 e. e. $9,600, and 2,900 sq.yd. Shreve Ave., $14,970 e. e. $18,600. Grand total 82,447. Noted June 17.

Arkansas—State Hy. Dept., Little Rock, **(F. A. P. means Federal Aid Project)**, to R. J. Lynch, Little Rock, improving 7.95 mi. Federal Aid Project 231-A, Ashley Co., 14,451 cu.yd. gravel, etc., $10,863, 5.07 mi. F. A. P. 199-A, Prairie Co., 19,036 cu.yd. excav., 6,601 lb. reinforcing, etc., $15,917, 6.31 mi. F. A. P. 229-A, Bradley Co., 22.56 acres clearing and grubbing, 69,892 cu.yd. excav., 24,922 sta.yd. overhaul, 1,390 ft. treated and 27,475 ft. untreated timber, 18,-449 lb. reinforcing, etc., $28,974; to E. L. Terry & Co., Brinkley, 11.02 mi. F. A. P. 240-B, Independence Co., 12.25 acres grubbing, 18,956 cu.yd. solid rock and 47,850 cu. yd. earth excav., 22,465 sta.yd. overhaul, 34,740 lb. reinforcing, 6,830 lb. structural steel, etc., $57,983, 10.9 mi. Tuckerman-Alicia Rd., Impvt. Dist. 8, Jackson Co., 11.23 acres grubbing, 74,584 cu.yd. excav., 20,567 cu.yd. gravel surfacing, 23,657 cu. yd. overhaul, 39,371 ft. treated timber, etc., $47,650; to W. P. McGeorge & Co., Pine Bluff, 4.91 mi. F. A. P. 194-A, Drew Co., 20.83 acres grubbing, 78,173 cu.yd. excav., 45,691 ft. treated and 2,500 ft. untreated timber, 6,789 lb. reinforcing, etc., $30,195; to H. Brown, North Little Rock, 1.65 mi. F. A. P. 241-A, Lawrence Co., 4,292 cu.yd. excav., 3,540 cu.yd. graveled shoulders, 17,-414 sq.yd. concrete surfacing, etc., $45,166. Grand total $236,748. Noted May 27.

Tex., Hubbard — City will pave with rein.-con. various streets, by day labor, under supervision T. A. Bullock, engr., Hillsboro. Approximately $45,000.

Okla., Oklahoma City — Oklahoma Co., grading and sheet asphalt paving 12,210 sq. yd. Spencer-Jones Rd., and concrete slab surfacing 2 mi. East Avenue G Rd., to Green-Boots Co., 519 West Main St., $24,-821 and $27,914 respectviley. Engrs. ests. $25,000 and $29,000 respectviely.

Idaho — Comrs. Bd. Pub. Wks., Court House, Sand Point, improving 5.24 mi. Federal Aid Project 100-B, North and South Highway, Bonner Co., to S. Orino, East 3008 Sharp St., Spokane, Wash., with c.i. pipe $45,850, concrete pipe $46,303. Noted May 13.

California—State Hy. Dept., Sacramento, **(e. e. means engineers estimate)**, crushed gravel or stone surfacing and grading approximately 10.8 mi. road between Alturas and Royce Ranch, Modoc Co., to J. P. Holland, Inc., San Francisco, $59,102 e. e. $49,600; asphaltic concrete widening and surfacing approximately 1.1 mi. road between Globe Iron Wks. and El Camino Ave., Sacramento Co., to Clark & Henery Constr. Co., San Francisco, $28,839 e. e. $31,135. Noted May 27.

Calif., Los Angeles — Los Angeles Co., curbing, guttering, and oil macadam paving, etc. 208,637 sq.ft. Impvt. 393, portion Los Angeles Ave., to G. T. McLain, 1184 North Berendo St., Los Angeles, $39,635.

Calif., San Carlos — Grading, curbing, guttering, etc., various streets in White Oaks Tract, to Frederickson & Watson, 354 Hobart St., Oakland, $94,308. Noted June 17.

Buildings—Commercial

Proposed Work

Mass., Boston — HOTEL — Paul Revere Hotel Corp., J. R. Jackson, pres., 82 Devonshire St., having revised plans prepared by T. M. James Co., 3 Park St., 16 story and basement, 114 x 148 ft., brick, stone and limestone, Stuart, Carver and Warrenton Sts. $1,000,000.

Mass., Gardner — HOSPITAL — State Hospital, State House, Boston, having plans prepared by C. P. Hoyt, 6 Beacon St., Boston, rein.-con., brick and steel addition, plain foundation. $150,000.

Mass., Medford (br. Boston) — THEATRE, STORE and APARTMENT—J. E. Locatelli, Highland Ave., making plans 4 story and basement, brick and steel, plain foundation, Playstead St. $400,000. Private plans.

Mass., Pittsfield — OFFICE — Berkshire Life Insurance Co., West St., soon lets contract 4 story and basement, brick, steel and limestone. $300,000. Harding & Seaver, 7 North St., archts. Noted June 17.

Conn., Hartford — BUSINESS — F. A. Pallotti, 1029 Main St., having plans prepared by D. A. Guerriero, 1029 Main St., 5 story, 65 x 100 ft., brick, steel, stone and terra cotta, Asylum St. $150,000.

Conn., Hartford — HOME — Hartford Orphan Asylum, Albany Ave., having plans prepared by G. Atterbury, 139 East 53rd St., New York City, convalescent home for children. $400,000.

Conn., Middletown—Y. M. C. A., F. S. Selleck, campaign mgr., plans Y. M. C. A. building. $350,000.

Conn., New Britain — THEATRE — LeWitt, Farley & McDonough, 299 Main St., having plans prepared 2 story and basement, 115 x 200 ft., rein.-con. and steel, Washington St. To exceed $150,000.

Conn., Putnam — THEATRE — S. A. Realty Co., 30 Pleasant St., having plans prepared by C. E. Horn, 1476 Bway, New York City, theatre, Main and Lee Sts. $150,000.

N. Y., New York — APARTMENT — Lexington-50th St. Corp., c/o E. Roth, engr. and archt., 119 West 40th St., having plans prepared brick, steel and stone, plain foundation, Lexington Ave. $2,000,000.

N. Y., New York — APARTMENT — G. Smith, c/o W. Koppe, engr. and archt., 565 East Tremont Ave., having plans prepared 6 story, brick, steel and stone, plain foundation, Bway. $200,000.

N. Y., New York — APARTMENT — Solomon & Kahn, 151 West 42nd St., having plans prepared by Schwartz & Gross, engrs. and archts., 347 5th Ave., 20 story, brick, steel and stone, plain foundation, 77th St. and West End Ave. $2,000,000.

N. Y., New York—CLUB HOUSE—Boys Club, 161 Ave. A, having plans prepared by J. F. Jackson, engr. and archt., 137 East 45th St., 6 story, brick, steel and stone, plain foundation, 315 East 111th St. $680,-000.

N. Y., New York——HOSPITAL—French Hospital, 450 West 34th St., soon takes bids brick, steel and stone, plain foundation, West 33rd St. $500,000. Crow, Lewis & Wick, 200 5th Ave., engrs. and archts. Noted Dec. 24.

N. Y., New York—HOTEL—I. Chanin, 285 Madison Ave., having plans prepared by Schwartz & Gross, engrs. and archts., 347 5th Ave., brick, steel and stone, plain foundation, 8th Ave. and 44th St. $3,000,-000.

N. J., Camden — STORE and OFFICE — Engineering & Constr. Dept. S. S. Kresge Co., Kresge Bldg., soon lets contract having plans prepared 2 story and basement, 60 x 155 ft., rein.-con., brick and steel, plain foundation, Bway. and Hudson Sts., here. $150,000. Private plans.

Pa., Phila.—APARTMENT—S. Kaplan, archt., 10 South 18th St., preparing plans 12 story and basement, 40 x 120 ft., rein.-con., brick and steel, plain foundation, 10th and Clinton Sts. $350,000. Owner's name withheld.

Pa., Phila.—OFFICE—Chanceller Realty Co., c/o R. B. Benckert, archt., Bellevue Court Bldg., having plans prepared 15 story and basement, 50 x 156 ft., rein.-con., brick and steel, plain foundation, 1420-22 Walnut St. $1,000,000.

Md., Baltimore — GARAGE — Baltimore Motor Terminal Co., E. Williams, pres., Hearst Tower, plans 10 story, rein.-con., plain foundation, Centre and St. Paul Sts. $700,000. C. Howard Crane & K. Franzheim, 347 Madison Ave., New York City, archts.

Miss., Gulfport — STORAGE WAREHOUSE—Bonded Warehouse & Storage Co. will not construct 5 story, rein.-con. storage warehouse and refrigeration plant. Project abandoned. $2,000,000. Noted Nov. 12.

La., Shreveport—COURTHOUSE—Caddo Parish takes bids after July 5, 8 story and basement, 120 x 220 ft., steel, rein.-con. and stone court house. $1,000,000. E. F. Neild, 1206 City Bank Bldg., archt. Noted Apr. 29.

O., Cleveland — COMMERCIAL and APARTMENT—N. M. Berke, 822 Leader-News Bldg., having plans prepared by Braverman & Havermaet, Ulmer Bldg., 3 story and basement, 90 x 93 ft., brick, East 85th St. and Euclid Ave. $150,000.

O., Cleveland — HOTEL—G. A. Ebeling, archt., 737 Prospect Ave. soon lets contract 10 story and basement, 100 x 120 ft., brick, steel and concrete, East 6th St. and St. Clair Ave., for Paul Bros., c/o G. Paul, Fidelity Mortgage Bldg. $800,000.

Ind., Indianapolis—MARKET—City, J. L. Dwoall, mayor, plans 2 story and basement, 200 x 350 ft. addition to Prescott City Market, Market and Alabama Sts. $1,000,-000. Private plans.

Mich., Detroit—HOTEL—Owner, c/o J. Kasurin, archt., 502 Empire Bldg., having plans prepared 8 story and basement, 225 room, rein.-con., brick and steel, plain foundation. $300,000.

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Buildings—Commercial (Continued)

Mich., Detroit—OFFICE—J. J. Barlum, 206 East Grand River, having plans prepared by Bonnah & Chaffee, 300 Barlum Bldg., 35 story and basement, 80 x 120 ft., rein.-con., brick and steel, plain foundation, Cadillac Sq.

Ill., Bloomington — HOTEL — J. F. Humphreys having plans prepared by H. L. Stevens & Co., 30 North Michigan Ave., Chicago, remodeling 4 story Humphrey Commercial Building, into 125 room brick and stone hotel. $165,000.

Ill., Chicago—APARTMENT—R. S. DeGoyler, et al., 307 North Michigan Ave., having plans prepared and takes bids about July 19 or Aug. 3, 17 story and basement, 108 x 150 ft., State and Goethe Sts. $2,500,000.

Ill., Chicago — APARTMENT — Devon Ave. Building Corp., c/o Oldefest & Williams, archts., 605 North Michigan Ave., having plans prepared and takes bids about July 15 or 30, 7 and 9 story and basement, 50 x 150 ft., rein.-con., brick and terra cotta, 6332 Winthrop Ave. $350,000.

Ill., Chicago—HOSPITAL—H. J. Gaul, archt., 228 East Superior St., takes bids about July 1, 6 story and basement, rein.-con., brick and stone, 4900 Thomas St., for St. Annes Hospital Poor Handmaids of Jesus Christ, 4900 Thomas St. Noted Dec. 10.

Ill., Chicago—HOTEL—W. C. Bannerman & Co., 77 West Washington St., having plans prepared by R. S. De Goyler & Co., 307 North Michigan Ave., 16 story and basement, 57 x 170 ft., brick, steel and terra cotta, incl. swimming pool, etc., 2136 Lincoln Park West. $1,600,000.

Ill., Glen Ellyn—LODGE—Glen Ellyn Lodge 950, A. F. and A. M. J. LeMessurier, secy., Glen Ellyn State Bank Bldg., will not build 2 story and basement, 125 x 220 ft., rein.-con., brick and stone temple. Project abandoned for present. $160,000. Noted Mar. 11.

Wis., Madison—APARTMENT—Badger Building Serv., Inc., 445 Milwaukee St., Milwaukee, having revised plans prepared by Peacock & Frank, 445 Milwaukee St., Milwaukee, 4 story and basement, 112 x 150 ft., rein.-con. and brick, plain foundation, here. $250,000. Noted Dec. 3.

Ia., Mount Ayr—COURT HOUSE—Ringgold Co. voted $150,000 bonds, new court house. C. Palmer, Mt. Ayr, aud. Noted May 20.

Ia., Sioux City—THEATRE—Orpheum Circuit, Inc., 190 North State St., Chicago, Ill., having preliminary plans prepared 4 and 8 story, 4,000 seating capacity, rein.-con., brick, steel, stone and terra cotta, 6th and Pierce Sts., here. $1,000,000.

Neb., Lincoln—OFFICE and STORE—Realty Syndicate, c/o W. E. Sharp, pres., Terminal Bldg., having plans prepared by J. G. McArthur, Keeline Bldg., Omaha, 15 story and basement, 100 x 142 ft., brick, steel, terra cotta and stone, plain foundation. $1,200,000.

Neb., Wilber—COURT HOUSE—Saline Co. defeated $175,000 bonds court house. Noted June 10.

Mo., Joplin—OFFICE——Empire Electric Co. takes bids about July 1, 4 story and basement, 50 x 120 ft., rein.-con. and brick office building. To exceed $150,000. C. A. Smith, 800 Finance Bldg., archt. Noted Mar. 25.

Mo., St. Louis — MARKET and COMMUNITY CENTER—Bd. Pub. Serv., 208 City Hall, having preliminary plans prepared by L. R. Bowen & A. Osburg, 301 City Hall, 2 story and basement, rein.-con., brick and stone, Soulard and 7th Sts. $267,000. L. R. Bowen & H. Updike, 301 City Hall, engrs.

Mo., St. Louis—OFFICE—Central State Life Insurance Co., 3207 Washington Ave., having preliminary plans prepared by T. P. Barnett, Arcade Bldg., converting club into 3 story and basement, 150 x 200 ft. office, 3663 Lindell Blvd. $160,000.

Ark., Hot Springs — THEATRE — S. M. Nutt, c/o Central Theatre, plans 113 x 198 ft. theatre, Prospect and Exchange Sts. Private plans.

Tex., College Station — LIVE STOCK — Southwestern Cattlemen's Assn., c/o J. G. Childers, member com., Temple, making preliminary plans, etc. 3 story live stock building. $300,000. Private plans.

Tex., San Antonio—THEATRE and OFFICE—Interstate Amusement Co., c/o K. Hoblitzelle, Dallas, plans Majestic Theatre, 16 story, rein.-con., brick and stone, plain foundation, Houston, St. Marys and Navarro Sts. $1,500,000. Noted Mar. 25.

Nev., Elko—BANK and OFFICE—First Natl. Bank had plans prepared by F. J. DeLongchamps, Gazette Bldg., Reno, 2 story, brick and terra cotta bank and office building. $150,000.

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Ore., Klamath Falls—THEATRE—H. W. Poole having sketches made by Reid Bros., 105 Montgomery St., San Francisco, Calif., Class A theatre, Main and 8th Sts. $150,000-$200,000.

Calif., Culver City—BANK and OFFICE—Pacific Building & Loan Assn., having plans prepared by Curlett & Beelman, 408 Union Bank Bldg., 16 story and basement, 1st 2 stories 75 x 112 ft., and upper stories in form of tower 45 x 75 ft., rein.-con. and steel, Main and Putnam Sts. $750,000.

Calif., Lodi—CLUB and AUDITORIUM—San Joaquin Co., plans fireproof building, for Amer. Legion Memorial. $150,000.

Calif., Los Angeles — HOSPITAL — Supervs. Los Angeles Co., soon lets contract fireproof osteopathic unit at Los Angeles Co. Hospital. $175,000 or more. Noted Dec. 31.

Calif., Los Angeles — POLICE STATION and HOSPITAL — Los Angeles Police Dept. had plans prepared by Los Angeles Constr. Dept., 404 Equitable Bldg., 3 story and basement, 100 x 105 ft., rein.-con. police station and emergency hospital, Georgia St. $225,000.

Calif., San Diego—STORE—Holzwassers, Inc., Bway., plans 14 story concrete, incl. aeroplane landing and underground garage, Bway. and 4th St. $3,000,000.

Calif., Visalia—HOSPITAL—Tulare Co. having plans prepared by E. J. Kump Co., Rowell Bldg., Fresno, fireproof hospital buildings. $150,000 or more.

Ont., Toronto—EXHIBITION—Canadian Natl. Exhibition, J. G. Kent, mgr., Lumsden Bldg., plans 1 and 2 story, rein.-con., brick and steel, plain foundation, Exhibition Park. $1,000,000. Engineer and architect not selected.

Ont., Toronto—THEATRE—R. McLelland, 2492 Yonge St., having plans prepared by Murray Brown, Confederation Life Bldg., 2 or 3 story and basement, rein.-con., brick and steel, plain foundation, Yonge St. $150,000.

Que., Montreal—APARTMENT HOTEL—Senneville Development Co. Ltd., J. H. Maher, pres., 390 Cote des Neiges, plans 10 story, rein.-con., concrete foundation, Drummond and Catherine Sts. $500,000. Engineer and architect not selected.

Bids Desired

Vt., Barre—ARMORY—State of Vermont, H. T. Johnson, Montpelier, general, taking bids on revised plans 3 story 75 x 125 ft., brick and stone armory $150,000. F. L. Austin, 240 College St., Burlington, archt. Noted May 13.

Mass., Turners Falls—THEATRE—P. S. Shea, taking bids 1 story and basement, brick and steel theatre. $150,000. J. H. McNaughton, 177 State St., Boston, archt. Noted June 10.

Mass., Walpole — STOREHOUSE — Lewis Mfg. Co., 53 West St., taking bids 6 story, 60 x 80 ft., rein.-con., West St. To exceed $150,000. Lockwood, Greene & Co., 24 Federal St., Boston, engrs.

Pa., Norristown—July 2, by Y. W. C. A., Airy and Maris Sts., 4 story and basement, 30 x 70 ft., and 30 x 90 ft., rein.-con., limestone and steel addition, plain foundation. $150,000. Thomas, Martin & Kirkpatrick, Cunard Bldg., Phila., archts.

Pa., Phila.,—APARTMENT—June 25, by W. S. Koelle, archt., Otis Bldg., 3 story and basement, 84 x 272 ft., rein.-con., brick and steel, plain foundation, 5427 Wayne Ave., for J. P. Eckert, Commercial Trust Bldg. $500,000.

Pa., Phila.—WAREHOUSE—E. A. Roth, archt., Drexel Bldg., taking sub-bids 5 story and basement, 41 x 125 ft., rein.-con., brick and steel, plain foundation, 20 North 3rd St., for H. Uditsky, c/o J. Uditsky & Co., 20 North 3rd St.

O., Cleveland — APARTMENT — Tatar & Arons, 1004 Linn Dr., taking bids 3 story and basement, 87 x 112 ft., brick, 1831 Alcoy Rd. $150,000. S. H. White, 1032 Schofield Bldg., archt.

O., Cleveland — CLUB HOUSE and AUDITORIUM — Aug. 2, by Sperry Realty & Investment Co., archts., Pittsburgh Bldg., St. Paul, Minn., 10 story and basement, 100 x 150 ft., brick, steel and concrete, East 40th St. and Windsor Ave., here, for Fraternal Order of Eagles, T. J. Long, pres., Society for Savings Bldg. $1,000,000.

O., Cleveland—WORK HOUSE—June 25, by City, D. S. Blosson, dir. Pub. Welfare, City Hall, Womens Work House, 2 story and basement, 100 x 100 ft., brick, steel and concrete, Warrensville Farm. $200,000. F. C. Warner & W. R. McCornack, Bulkley Bldg., archts.

Mich., Benton Harbor — M. W. Stock Constr. Co. (contractors), St. Joseph, taking sub-bids 4 story and basement, 94 x 133 ft., rein.-con., brick and steel, plain foundation, incl. swimming pool and billiard room, etc., here, for Benton Harbor St. Joseph Y. M. C. A. Zimmerman, Saxe & Zimmerman, 212 East Superior St., archts.

Mich., Northville—HOUSE of CORRECTION—June 28, by A. Kahn, archt., 1000 Marquette Bldg., Detroit, 2 story and part basement 43 x 186 ft., and 42 x 42 ft. administration building, 3 2 story and part basement, 66 x 118 ft. cottages, 2 story and part basement, 36 x 53 ft. superintendent's cottage, and 3 2 story and part basement, 66 x 117 ft. cottages, all rein.-con. and brick, for (Women's Sect.) Detroit House of Correction, 1441 Alfred St.

Ill., Chicago — HOTEL — June 26, by Berlin & Swern, archts., 19 South La Salle St., 19 story, 50 x 165 ft., rein.-con. and steel, annex, 822 South Wabash Ave., for Y. M. C. A., 19 South La Salle St.

Ill., Chicago—POST OFFICE—July 1, by Windsor Park Sta. Building Corp., 33 South La Salle St., Post Office 1, 3 story, 100 x 120 ft., brick and terra cotta, 2207-13 East 75th St. $275,000.

Wis., Milwaukee — CLUBHOUSE — June 28, by J. R. Pope, archt., 542 5th Ave., New York City, N. Y., 5 story and basement, 80 x 110 ft., brick, stone and concrete, plain foundation, Juneau Pl., for University Club, 491 Jefferson St. $400,000. Noted June 17.

Wis., Milwaukee—LODGE—July 1, by V. J. Starszak, 746 Greenfield Ave., secy., Pythian Castle, Inc., 464 11th Ave., 2 story and basement, 105 x 130 ft., brick, concrete and terra cotta, National Ave. $150,000. R. E. Oberst, 128 Grand Ave., archt. Noted Mar. 25.

Neb., Omaha—BANK—June 28, by Union State Bank, 16th and Dodge Sts., F. C. Horacek, pres., 7 story and basement, 68 x 132 ft., rein.-con., 19th and Farnum Sts. $750,000. J. Latenser & Sons, Peters Trust Bldg., archts. Noted Feb. 4.

Tex., Dallas — APARTMENT HOTEL — Tucker & McQueen (owners) and W. A. Cooke, archt., 708 Wilson Bldg., taking bids 10 story and basement, 44 x 90 ft., brick, stone and rein.-con., St. Paul St. near Ross Ave. $250,000.

Tex., San Antonio—HOTEL—June 30, by Baker Hotels of Texas, c/o T. B. Baker, Gunter Hotel and H. S. Green, archt., c/o Alamo Natl. Bank Bldg., remodeling 1st and mezzanine floors of present building and constructing 3 story, rein.-con., brick and stone top addition, plain foundation, Houston and St. Mary's Sts. $700,000. Noted June 17.

Calif., Los Angeles—APARTMENT—See "Contracts Awarded."

Calif., Los Angeles—LOFT—See "Contracts Awarded."

Calif., Oakland — APARTMENT — See "Contracts Awarded."

Bids Received

O., Cleveland—POLICE STATION and GARAGE—City, June 11, E. S. Barry, dir. Pub. Safety, City Hall, 1 and 3 story, 80 x 85 x 120 ft., brick, steel and concrete, East 35th St., from Natl. Concrete Fireproofing Co., Union Mortgage Bldg., $285,700. Noted June 10.

Calif., Brentwood — CLUB — Brentwood Country Club, part 1 and 3 story, hollow wall rein.-con. clubhouse, from Sumner-Sollitt Co., Delta Bldg., Los Angeles, $158,555.

Calif., Santa Monica — CLUB — Santa Monica Elks Lodge, 5 story and basement, 81 x 200 ft., rein.-con., Main St. and Pier Ave., Ocean Park, from W. G. Reed, 1914 South Vermont Ave., Los Angeles, $244,700.

Contracts Awarded

N. H., Manchester — OFFICE — Manchester Traction Light & Power Co., 3 story and basement, 60 x 100 ft., rein.-con. and brick, plain foundation, Elm and Lowell Sts., to L. H. Shattuck, Inc., 208 Granite St. Archts. est. $150,000.

Mass., Boston — SALES and SERVICE STATION — Suburban Realty Corp., c/o E. B. Stratton, 25 Arch St., 3 story, 60 x 160 ft., brick and steel, 124-130 Brookline Ave., to F. V. Van Etten Co., 100 Boylston St. Archts. est. $250,000.

Mass., Boston—STORE and OFFICE—D. Sears, c/o Shepard & Stearns, archts., 65 Franklin St., 6 story and basement, brick and steel, plain foundation, Dock Sq. and Washington St., to Gerry & Northrop, 497 Harrison Ave. Archts. est. to exceed $150,000. Noted June 10.

R. I., Woonsocket—STORE, OFFICE and SOCIETY—L. Union St. Jean the Baptist, c/o W. F. Fountain, archt., 285 Main St., 3 story and basement, brick and stone, plain foundation, to Bouvier-Brien Constr. Co., 189 Salem St. Archts. est. to exceed $150,000. Noted June 10.

N. Y., Albany—BANK—Home Savings Bank, North Pearl St., 19 story, brick, steel and stone, plain foundation, North Pearl St., to J. Dyer, 17 Steuben St. Noted June 3. Engrs. est. $3,000,000.

Buildings—Commercial (Continued)

N. Y., New York — APARTMENT — Six Hundred and Sixty Park Ave., Corp., c/o York & Sawyer, engrs. and archts., 100 East 42nd St., brick, steel and stone, plain foundation, 67th St. and Park Ave., to Starrett Bros., 292 Madison Ave. Archts. est. $650,000.

N. Y., New York—LOFT—Trinity Church Corp., c/o Parker & Shaffer, engrs. and archts., 280 Madison Ave., 12 story, 125 x 200 ft., brick, steel and stone, plain foundation, Varick St., to White Constr. Co., 95 Madison Ave. Archts. est. $1,000,000. Noted June 10.

N. J., Atlantic City — BANK and ARCADE — Boardwalk Nare Corp., 100 x 377 ft., rein.-con., brick and steel, plain foundation, Tennessee Ave. and Boardwalk, to G. A. Fuller, Morris Bldg., Phila., Pa.

N. J., Camden — BANK and OFFICE — Land Title & Guaranty Co., 4 additional stories, 38 x 100 ft., rein.-con., brick and steel, plain foundation, 5th and Chestnut Sts., here, to Cramp Co., Denckla Bldg., Phila., Pa.

N. J., Newark—HOSPITAL—Beth Israel Hospital, 7 story and basement, 400 x 450 ft., rein.-con. and steel, plain foundation, Lyons Ave., to Starrett Bros., 292 Madison Ave., New York City. Archts. est. $2,000,000. Noted Feb. 4.

N. J., Ocean City—APARTMENT—Acme Holding Co., c/o R. G. Pratt, Franklin Trust Bldg., Phila., Pa., 4 story, and basement, 35 x 185 ft., rein.-con., brick and steel, plain foundation, to Freil-McLeister Co., 334 South Smedley St., Phila., Pa. Engrs. est. $300,000.

Pa., Phila. — APARTMENT — Warren Apartment Corp., c/o Lippincott & Schaef, archts., 11 South 16th St., 10 story and basement, 48 x 120 x 140 ft., rein.-con., brick and steel, plain foundation, 63rd and Columbia Sts., to R. P. Whitty Co., Union Trust Bldg., Wash., D. C. Archts. est. $750,000. Noted June 10.

Pa., Phila.—BANK and OFFICE—W. H. Lee, archt., Schaff Bldg., general contract 11 story, mezzanine, basement and sub-basement, 49 x 55 ft., rein.-con., brick, steel and granite, plain foundation, Broad and Airdrie Sts., to Wark Co., 1600 Walnut St., for Natl. Bank of North Phila., 3701 North Broad St. Archts. est. $400,000. Noted May 20.

Pa., Phila.—BUS GARAGE—Phil. Rapid Transit Co., 8th and Dauphin Sts., 1 and 2 story, 290 x 500 ft., rein.-con., brick and steel, plain foundation, Comly and Penn Sts., to Baton Constr. Co., 1713 Sansom St. Archts. est. $180,000. Noted Apr. 29.

Pa., Phila.—RESTAURANT and OFFICE—R. B. Benekert, archt., Bellevue Court Bldg., 3 story, basement and sub-basement, 33 x 130 ft., rein.-con., brick, steel and limestone, plain foundation, 217-19 South Broad St., to Wark Co., 1600 Walnut St. Archts. est. $200,000. Noted June 10.

Ga., Savannah—HOSPITAL—Central of Georgia R.R. Co., C. K. Lawrence, ch. engr., masonry contract 3 story, brick and tile hospital, to Clausen & Lawrence, Augusta. Archts. est. $300,000. Noted Mar. 18.

O., Cleveland — APARTMENT—Narosny & Libhaber, 410 East 112th St., 3 story and basement, 42 x 116 ft., brick, 1715 East 115th St., to M. Berkoff, 2346 East 135th St. Archts. est. $150,000. Noted June 10.

O., Cleveland — COMMERCIAL and APARTMENT — A. Kramer, 11503 Saywell Ave., 3 story and basement, 60 x 114 ft., brick, East 140th St. and Lake Shore Blvd., to M. Kutnick, 3554 East 118th St. Archts. est. $150,000. Noted June 10.

O., Cleveland — THEATRE — Playhouse Foundation, c/o C. S. Brooks, pres., 7298 Cedar Ave., 1 and 3 story, 125 x 150 ft., brick, steel and concrete, East 86th St., to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $250,000. Noted May 6.

O., Steubenville — STORE and APARTMENT — F. S. King & W. C. Brown, 4 story and basement, 59 x 130 ft., brick and steel, 5th Ave. and Washington St., to H. K. Ferguson Co., 4900 Euclid Ave., Cleveland. $200,000.

Ind., Gary—WAREHOUSE, etc.—Heat, Light & Water Co., general contract 3 story and basement, 125 x 125 ft., warehouse, shop and garage, to Williams & Pitch, Gary. Archts. est. $200,000. Noted May 6.

Mich., Detroit — —GARAGE — Detroit Garages, Inc., Elizabeth St., 8 story, 80 x 100 ft., rein.-con., brick and steel, plain foundation, to H. C. Christman Co., 315 Stevens Bldg. Archts. est. $200,000. Noted Apr. 29.

Ill., Chicago—APARTMENT—F. Becklenberg, 29 South La Salle St., masonry and concrete contract 13 story and basement, 75 x 149 ft., brick and terra cotta, plain foundation, 442 Wellington Ave., to H. Janisch & Co., 1813 Winona St.; plumbing, to Fettes & Love & Sieben, 1426 Irving Park Blvd.; heating, to N. B. Brown & Co., 19 South La Salle St. Archts. est. $750,000. Noted Apr. 29.

Ill., Chicago—GARAGE——F. Kaplan, c/o Fox & Fox, archts., 38 South Dearborn St., masonry and concrete contract 3 story and basement, 93 x 168 ft., rein.con., 3157-63 Bway., to Broline-Nolan Co., 5 North La Salle St. Archts. est. $300,000.

Ill., Chicago—HOTEL—B. Edidin, 2151 North Spalding Ave., general contract 6 story and basement, 48 x 142 ft., Kedzie Blvd. and Wrigh'wood Ave., to L. Edidin, 2151 North Spalding Ave. Archts. est. $200,000.

Ill., Des Plaines—BANK—Wolfe, Sexton, Harper & Treaux, archts., 431 North Michigan Ave., Chicago, general contract 2 story and basement, 56 x 123½ ft., brick and stone bank, here, to Olson & Johnson, 4411 North Kedzie Ave., Chicago, for Des Plaines State Bank. Archts. est. $250,000. Noted Apr. 8.

Wis., Antigo — BANK — Langlade Natl. Bank, 2 story and basement, 72 x 88 ft., concrete and stone, plain foundation, to C. J. Hansen, 222 South 12th Ave., Green Bay. Archts. est. $150,000. Noted May 20.

Wis., Manitowoc—HOTEL—M. Tullgren & Sons, archts., 9 Waverly Pl., Milwaukee, 8 story and basement, 92 x 100 ft., brick and concrete, plain foundation, North 8th St., to W. W. Oflein, Inc., 86 Michigan St., Milwaukee, for Manitowoc Hotel Corp., G. Vits, 15th and Franklin Sts., pres. Archts. est. $500,000. Noted May 13.

Wis., Milwaukee — THEATRE — A. H. Bartelt, 1350 8th Ave., 2 story and basement, 60 x 90 ft., and 60 x 120 ft., brick and concrete, plain foundation, 8th and Oklahoma Aves., to Pacholski & Doligalski, 448 Mitchell St. Archts. est. $150,000.

Kan., Kansas City — APARTMENT HOTEL — C. W. McLaughlin, general contract 8 story and basement, 50 x 56 ft., rein.-con., brick and steel, 18th and Nebraska Sts., to Industrial Eng. & Constr. Co., Kansas City Life Bldg., Kansas City, Mo. Archts. est. $175,000.

Mo., Kansas City—WAREHOUSE—Kellogg-MacKay Co., 21st and Walnut Sts., 5 story and basement, 75 x 104 ft., rein.-con. and brick, 2020 Walnut St., to H. Striver, 408 Shukert Bldg. Archts. est. $150,000. Noted Apr. 22.

Tex., Vernon—HOTEL—O. A. Thompson, Amarillo, general contract 5 story and basement, 50 x 140 ft., rein.-con. and brick and stone, to H. W. Underhill Constr. Co., Wichita, Kan. Archts. est. $175,000.

Okla., Oklahoma City—OFFICE—R. Perrine, 130½ West 1st St., C. G. Anderson, mgr. and superv., 12 story and basement, 125 x 140 ft., rein.-con., plain foundation, 1st and Robinson Sts., to Manhattan Constr. Co., Manhattan Bldg., Muskogee. $1,600,000.

Calif., Los Angeles—APARTMENT—L. Callahan & Sons, 518 Carondelet St., will build 5 story and basement, 113 x 136 ft. apartment, Normandie St. between 7th and 8th Sts., by day labor and subcontracts. $250,000. Private plans.

Calif., Los Angeles—THEATRE—H. E. Jones (representing owner), 2 story, 100 x 181 ft., steel and rein.-con., Vine St. near Hollywood Blvd., to W. Simpson Constr. Co., Hollywood Guaranty Bldg., $300,000. Noted Jan. 7.

Calif., Oakland — APARTMENT — S. Morris, 4162 Quigley St., will build 7 story and basement, brick and steel Staten St. and Grand Ave., by day labor and subcontracts. $150,000.

Calif., Oakland—LOFTS—Montgomery-Ward Co., 2825 East 14th St., 8 story, rein.-con. annex, East 14th St., to Wells Bros., 53 West Jackson Bldg., Chicago, Ill., approximately $475,000. Noted Feb. 11.

Calif., Sacramento — OFFICE — C. H. Straub, 2632 Mission St., San Francisco, 3 story and basement, 160 x 160 ft., rein.-con. 11th and P Sts., to Lindgren-Swinerton, Inc., 225 Bush St., San Francisco, $325,000. State Motor Vehicle Dept., lessee.

Calif., San Francisco—CLUB and HOTEL—Club Farallon, J. B. Detwiler, pres., Shreve Bldg., 6 story club and hotel, Harding Blvd., to Lindgren-Swinerton, Inc., 225 Bush St., $1,175,000. Noted June 3.

Calif., Santa Monica — CLUB — C. H. Russell Co., archts., Story Bldg., Los Angeles, general contract 5 story and basement, 80 x 200 ft., brick, Main St. and Pier Ave., to W. G. Reed, 1014 South Vermont Ave., Los Angeles, for B. P. O. E., Santa Monica Lodge. $242,750. Noted May 6.

Buildings—Industrial

Proposed Work

Mass., Somerville (br. Boston)—PLANT—First Natl. Stores, Inc., M. O'Keefe, pres., having plans prepared 1 and 2 story, 500,000 ft. floor space, brick and steel, Mystic and Middlesex Aves. $2,000,000. Monks & Johnson, 99 Chauncy St. Boston, engrs. Noted Mar. 25.

Pa., Phila.—FACTORY—Crescent Ink & Color Co., 460 North 5th St., having plans prepared by P. S. Tyre, 114 South 15th St., 1 story and basement, 30 x 52 ft.; rein.-con., brick and steel addition, plain foundation, 5th and Hamilton Sts.

O., Columbiana — FACTORY — Standard Porcelain Wks. soon takes bids 2 story factory. $45,000.

O., Dayton—FACTORY—Delco-Light Co., 3rd Natl. Bank Bldg., plans new plant, incl. 1 story, 210 x 2,400 ft. building, two 6 story, 80 x 550 ft. buildings, one 1 story, 210 x 800 ft. addition, also warehouse, etc., all structural steel and concrete, at Moraine City (Dayton P. O.). $5,000,000. Schenk & Williams, Mutual Home Bldg., Dayton, archts. and engrs.

O., Mansfield—SERVICE—Westinghouse Electric & Mfg. Co., Pittsburgh, Pa., soon lets contract one 4 story and one 1 story buildings, brick and steel, here.

Ind., Muncie—PLANT—Kuhner Packing Co., Whiteley and 13th Sts., soon take bids 2 story and basement, 90 x 181 ft., brick plant. $200,000.

Mich., Jackson—PRINTING PLANT, etc.—A. Kahn, archt., 1000 Marquette Bldg., Detroit, soon lets contract 2 story and basement, 91 x 132 ft., rein.-con., brick, steel and stone printing plant and office building, South Jackson St., here, for Jackson Citizen Patriot. $200,000.

Mich., Pontaic—AUTOMOBILE PLANT—General Motors Corp., Oakland Motor Car Branch, having plans prepared 2 story and basement 150 x 2,000 ft. assembly building, 450 x 900 ft. car storage and shipping building, 1 story, 370 x 700 ft. motors building, detached power plant, and rein.-con. loading docks, Oakland Ave. $5,000,000. Private plans.

Mo., Kirkwood—ELECTRIC PLANT—Election July 11, $50,000 bonds, improving municipal electric plant, etc.

Mo., Nevada—ROUND HOUSE—Missouri Pacific R.R. Co., Ry. Exch. Bldg., St. Louis, E. A. Hadley, ch. engr., having plans prepared 50 x 100 ft., 5 stall addition, machine shop, etc., here. $120,000. Private plans.

Mo., St. Louis — NEWS DEPOT — St. Louis News Co., Inc., 1008 Locust St., purchased site and plans 2 story and basement, 72 x 128 ft., brick and concrete, 14th St. $150,000. Private plans.

Ont., Petrolia — SUGAR FACTORY — Peninsula Sugar Co. having plans prepared sugar factory. $1,000,000.

B. C., Vancouver—BREWERY—Kamloops Brewing Co., Kamloops, plans brewery on False Creek, here. $300,000. Engineer and architect not selected.

Bids Desired

Mass., Boston—PLANT—Swift & Co., 60 North Market St., Boston, taking bids 1 story and basement, rein.-con. and brick addition, Alexander St. $40,000. Private plans.

Mass., Boston—REPAIR and SERVICE GARAGE—See "Contracts Awarded."

Mass., Boston—REPAIR and SERVICE GARAGE—See "Contracts Awarded."

Mass., Brockton—REPAIR and SERVICE GARAGE—R. Thompson, 42 Cottage St., taking bids 2 story and basement, 40 x 115 ft., brick, Washburn Ave. $50,000. Private plans.

Conn., Hartford — CABINET FACTORY —See "Contracts Awarded."

Conn., Hartford — FACTORY — Royal Typewriter Co., 150 New Park Ave., taking bids 2 story, 95 x 210 ft., brick addition. To exceed $40,000. Greenwood & Noerr, 847 Main St., archts. Noted June 3.

Pa., Phila.—BOILER ROOM—June 28, by City Mission Home for Consumptives, Chestnut Hill, 1 story, 25 x 30 ft., rein.-con., brick and steel, plain foundation, 8815 Germantown Ave. Farness Evans Co., 313 South 15th St., archts.

Ga., Atlanta—SUB-STATION—See "Contracts Awarded."

O., Fairport Harbor (br. Painesville)—FACTORY—June 29, by Ballinger Co., archts., 12th and Chestnut Sts., Phila., Pa., 2 story, 121 x 226 ft. brick and rein.-con. factory; plain foundation, with 48 x 100 ft. steel stack, here, for P. C. Tomson Co., 27 Washington Ave., Phila., Pa.

Wis., Madison — WAREHOUSE—Standard Oil Co., 414 Sycamore St., Milwaukee, taking bids 1 story, 60 x 95 ft., rein.-con., brick, and steel warehouse and service station, here. $40,000. Schlenz & Bailey, 53 West Jackson Blvd., Chicago, Ill., archts.

Wis., Milwaukee — FACTORY — Brust & Philipp, archts., 405 Bway., taking bids 2 story, 36 x 136 ft., brick and timber addition, plain foundation, National Ave., for

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Buildings—Industrial (Continued)

Slocum Straw Wks., 656 National Ave. $40,000.

Ont., Hamilton—POWER STATION—See "Contracts Awarded."

Contracts Awarded

Me., Lewiston — ROUND HOUSE and STOREHOUSE—Maine Central R.R. Co., brick and steel, to Horace Purinton Co., 65 Temple St., Waterville. Archts. est. $40,000.

Mass., Boston—REPAIR and SERVICE GARAGE—Baker, Selensnick & Coplan, 22 Watts St., Chelsea, will build 1 story, brick, Hampden and George Sts. $50,000. Work will be done by separate contracts. S. E. Moffie, 51 Cornhill, archts. Noted June 17.

Mass., Boston—FREIGHT TERMINAL—Boston & Maine R.R., F. C. Shepherd, ch. constr. engr., rearranging and improving freight terminal, to Dwight P. Robinson & Co., 125 East 46th St., New York City.

Mass., Boston — REPAIR and SERVICE GARAGE — J. Magnes, 18 Tremont St., 1 story, brick, Floyd and Bosswood Sts. $40,000. Work will be done by separate contracts. S. E. Moffie, 51 Cornhill, Boston, archt.

Mass., Somerville (Boston P. O.) — GARAGE—Boston Elevated Ry. Co., 31 St. James Ave., Boston, 2 story, 45 x 145 ft., rein.-con., brick and steel, Washington St., to Simpson Bros. Corp., 77 Summer St., Boston. Archts. est. $250,000. Noted May 27.

R. I., Woonsocket — MILL — Woonsocket Falls Mill, 2 story, brick and steel addition, to Aberthaw Co., 80 Federal St., Boston, Mass., $75,000.

Conn., Hartford—CABINET FACTORY—C. H. Dresser & Son, 287 Sheldon St., will build 4 story, 40 x 130 ft., brick, Union St. $40,000. Work will be done by separate contracts. Private plans.

N. Y., Albany—WAREHOUSE—International Plumbing Co., Tivoli St., 2 story and basement, rein.-con., brick and steel, 733 Bway., to Ferro Machine & Fdry. Co., East 66th St. and Hubbard Ave., Cleveland, O., $125,000.

N. J., Camden—SUPPLY HOUSE—H. B. Robinson, Franklin Trust Bldg., Phila., 1 story and basement, 150 x 210 ft., rein.-con., brick and steel, plain foundation, 6th and Everett Sts., here, to Nelson-Pedley Co., Corn Exchange Bank, Phila., Pa. Engrs. est. $75,000.

Pa., Easton—MILL—Chipman Knitting Mills, 3 story, 106 x 110 ft. hosiery mill, here, to R. T. and C. D. Stewart Constr. Co., Easton, $250,000.

Pa., Phila.—MANUFACTURING—Soabar Co., 4608 Edmund St., 1 story, 110 x 167 ft., rein.-con., brick and steel, plain foundation, Erdnick and Van Kirk Sts., to Hughes-Foulkrod Co., Commonwealth Bldg. Archts. est. $40,000.

N. C., Kannapolis — POWER PLANT — Cannon Mfg. Co., contract for foundation and superstructure power plant, to Brown-Harry & Co., Gastonia; structural steel, to Virginia Bridge & Iron Co., Roanoke, Va.

Ga., Atlanta — SUB-STATION — Georgia Railway & Power Co., 75 Marietta St., will build 2 story, rein.-con. and brick sub-station, by day labor. $75,000. Private plans.

O., Cleveland—FACTORY—Boure-Fuller Co., Hanna Bldg., brick, steel and concrete addition, 1952 Scranton Rd., to H. K. Ferguson Co., 4900 Euclid Ave.

O., Cleveland — SUB-STATION — Cleveland Electric Illuminating Co., c/o E. J. Cook, engr. of constr. Illuminating Bldg., 1 story and basement, 33 x 70 ft., brick, steel and concrete electric sub-station, Canal and Granger Rds., to Hunkin-Conkey Constr. Co., Hunkin-Conkey Bldg. Archts. est. $50,000. Noted June 10.

O., Cleveland — SHOP — Rex. Products (screw products), c/o F. B. Wadhams, 5606 Euclid Ave., 1 story, 69 x 168 ft., brick and steel, 1916 East 55th St., to P. De Lorenzo, 3419 East 137th St. Archts. est. $50,000. Noted June 10.

O., Cleveland—FACTORY—White Motor Co., W. C. White, pres., 842 East 79th St., 1 story and basement, 150 x 160 ft. brick, steel and concrete addition, East 79th St., to G. A. Rutherford Co., 2725 Prospect Ave. Archts. est. $90,000. Noted June 10.

Wis., Two Rivers—BOILER HOUSE—Aluminum Goods Mfg. Co., 15th and Franklin Sts., Manitowoc, general contract reconstructing 2 story, brick, steel and concrete, plain foundation, to W. W. Oeflein, 86 Michigan Ave., Milwaukee. Engrs. est. $60,000.

Ont., Hamilton—POWER STATION—Eng. Dept. Dominion Power & Transportation Co., G. E. Walker, mgr., King and Catherine Sts., will build power station addition, Dundurn and King Sts., by day labor. $50,000. Noted June 10.

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Buildings—Educational, Religious

Proposed Work

Mass., Andover — SCHOOL — Phillips Andover School having plans prepared by G. Lowell, 12 West St., Boston, school of sciences. $200,000.

Mass., New Bedford — CHURCH and PARISH HOUSE — Trinitarian Church Home, 636 Purchase St., having sketches made by Cram and Ferguson, 248 Boylston St., Boston, 1 and 2 story and basement, brick, Hawthorne St. To exceed $150,000. Noted Apr. 30.

N. J., Camden—PAROCHIAL SCHOOL—Holy Name Roman Catholic Church, L. Whelen, pastor, having plans prepared by G. I. Lovatt, 223 South Sydenham St., Phila., 3 story and basement, 70 x 125 ft., rein.-con., steel and stone, plain foundation, 5th and Vine Sts.

O., Cleveland—ADMINISTRATION and CLASSROOM—T. D. McLaughlin & associates, 610 Savings Bldg., Lima, soon lets contract 4 story 83 x 326 ft. administration and classroom building also 50 x 128 ft. power plant, brick, steel and concrete, Green Rd., for Sisters of Notre Dame, c/o Mother Mary Evarista, Sister Superior, 1325 Ansel Rd. $450,000.

O., Cleveland—GRAPHIC ARTS—Austin Co., W. J. Watson, pres., 16112 Euclid Ave., having plans prepared 6 story and basement, brick and concrete, East 21st St. $500,000. Private plans.

Ill., East St. Louis—HIGH SCHOOLS—Election June 19, $700,000 bonds, two 3 story, rein.-con., brick, stone and terra cotta, one at 42nd and Van Buren Sts., and other 38th and State Sts., for Bd. Educ., J. S. Pidgeon, secy., 600 St. Louis Ave. Noted Apr. 22.

Ill., Springfield — ADMINISTRATION — Concordia College, H. A. Klein, pres., 1301 Concordia Court, soon takes bids rein.-con., brick and stone administration building. $179,000.

Mo., Carrollton — SCHOOLS — Defeated $180,000 bonds, constructing schools. Noted May 27.

Tex., Ft. Worth—CHURCH and OFFICE—First Methodist Congregation, c/o E. B. Hawk, pastor, plans 16 story and basement, brick, stone and rein.-con., 7th and Taylor Sts. $1,000,000. Engineer and architect not selected.

Tex., Sweetwater — HIGH SCHOOL — Election June 29, $225,000 bonds, 2 story, rein.-con., brick and stone, plain foundation. Page Bros., 348 Austin Natl. Bank Bldg., Austin, archts.

Bids Desired

Mass., Springfield—SCHOOL—June 28, by Pub. Buildings Dept., City Hall, 2 story and basement, brick and stone school. $150,000. M. W. Maloney, 23 Pearl St., archt. Noted May 20.

Mass., Quincy (Ind. br. Boston)—HIGH SCHOOL—City, Bd. Educ., taking bids Junior High School, 2 story and basement, brick and stone, Centre and Roberts Sts. $400,000. Shepard & Stearns, 65 Franklin St., Boston, archts. Noted May 20.

Conn., Hartford — SYNAGOGUE — June 26, by Emanuel Synagogue, M. Silverman, rabbi, 2 story, 85 x 165 ft., brick and stone, Woodland St. $250,000. Ebbets & Frid, 15 Lewis St., archts. Noted June 10.

N. Y., West Brighton (mail West New Brighton)—SCHOOL—July 7, by W. H. Gompert, supt. School Bldgs., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 45, Morrison Ave. from Lawrence to Davis Aves., here, for Bd. Educ., 500 Park Ave., New York City. Noted Apr. 15 under "St. George."

Pa., Bryn Mawr—CHURCH—June 25, by Karcher & Smith, archts., 34 South 17th St., Phila., 1 story, balcony and tower, 96 x 160 ft., rein.-con., steel and limestone, plain foundation, for Bryn Mawr Presbyterian Church, c/o architects. $500,000.

Pa., Phila. — CHURCH and SUNDAY SCHOOL — June 28, by Stuckert & Co., archts., 1420 Chestnut St., 2 story and basement and 1 story, balcony and basement, 75 x 110 ft., steel and stone plain foundation, Broad and Grange Sts., for Heidelberg Reformed Church, c/o. architects. $150,000. Noted Jan. 28.

Pa., South Williamsport (Williamsport P. O.)—SCHOOL—July 6, by Bd. Educ., W. M. Wise, secretary, 801 Main St., 3 story, 80 x 160 ft., rein.-con., brick and steel addition to high school; 1 each of 20 x 40 ft. and 20 x 72 ft. portable schools. $200,000. W. D. Schollenberger, 11 West 4th St., Williamsport, archt. Noted Feb 11.

Miss., Columbus—DORMITORY—July 2, by R. L. Brown, secy. Mississippi Building Comn., at office President Mississippi State College for Women $150,000, dining hall $75,000, and laundry $18,000. Noted June 10.

O., Massillon — CHURCH — June 25, by Corbusier, Lenski & Foster, archts., B. F. Keith Bldg., Cleveland, 1 story, brick, stone and steel church, here, for St. Pauls Evangelical Lutheran Church, F. P. Hax, pastor, 305 East Cherry St. $150,000.

O., Shaker Heights (mail Cleveland)—SCHOOLS—June 28, by Bd. Educ., J. W. Main, clk., South Woodland and Woodbury Rd., two 2 story and basement, brick, steel and concrete, one at Ludlow and Southington Rds., and other at Fernway and Dorchester Rds. $200,000 each. C. S. Schneider, 1836 Euclid Ave., Cleveland, archts. Noted Dec. 24.

Ind., Indianapolis—SCHOOL—June 29, by Catholic High School, 14th and Meridian Sts., 3 story and basement, brick and steel high school, incl. chapel and living rooms. $1,000,000. A. Scherer, 415 Indiana Trust Bldg., archts. Noted Mar. 18.

Ind., South Bend—SCHOOL—July 2, by Bd. School Trustees, Grade School, West Division St. $200,000. Freyermuth & Maurer, 654 Associate Bldg., archts.

Ia., Bedford—HIGH SCHOOL—June 30, by Secretary Bd. Educ., 2 story, 117 x 182 ft., rein.-con. and brick, plain foundation. $145,000. Keffer & Jones, 204 Masonic Temple, Des Moines, archts. Noted May 20.

Ia., Des Moines—CHURCH—June 30, by Vorse, Kraetsch & Kraetsch, archts. and engrs., 1201 Commonwealth Bldg., 3 story and basement, rein.-con., brick and stone, plain foundation, for Grace Methodist Episcopal Church. $350,000. Noted Apr. 22.

Tex., Dallas—SCHOOL—June 29, by T. J. Galbraith, archt., 2 story, 90 x 134 ft., rein.-con. and stone, Gilbert and Herschel Sts., for Bd. Educ., c/o C. M. Moore, secy. $150,000.

Calif., Long Beach—SCHOOL and AUDITORIUM—See "Contracts Awarded."

Bids Received

Mass., Medford (br. Boston) — HIGH SCHOOL — City, W. White, chn. building comn., general contract Junior High School, 3 story and basement, irregular shaped, brick and stone, plain foundation, Court St., from C. S. Cunningham Constr. Co., 80 Boylston St.; Boston, $446,600, heating and ventilating system, from R. B. Crocker Co., 107 Mass. Ave., Boston, $60,400.

Contracts Awarded

Mass., Cambridge (Boston P. O.) — PARISH HOUSE — First Congregational Church, c/o W. H. McLaen, archt, 88 Tremont St., 2 story and basement, 95 x 110 ft., brick and stone, Mason St., to Joslin & Landry Co., 107 Massachusetts Ave., Boston. Archts. est. $150,000. Noted May 13.

Conn., New Haven — COLLEGE — Yale University, Harkness Hall, College and Flount Sts., to Sperry & Treat Co., 39 Church St. Archt. est. $750,000.

N. Y., New York—LIBRARY—City of New York, Pub. Library, 42nd St. and 5th Ave., brick, steel and stone, plain foundation, 36th St. and Madison Ave., to Marc Eidlitz & Son, Inc., 41 East 42nd St. Archts. est. $200,000.

Calif., Long Beach—SCHOOL and AUDITORIUM—Roman Catholic Archbishop, Los Angeles, will build 2 story, rein.-con. and brick high school and auditorium, by day labor. $150,000 or more.

Federal Government Work

Proposed Work

N. Y., Brooklyn—Extracting and Purifing System — Spec. 5220 — Bureau Yards & Docks, Navy Dept., Wash., D. C., plans oil extracting and purifying system, at U. S. Navy Yard, here.

P. I., Canacao—Quarters—Spec. 5157—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon takes bids two 1 story junior officers quarters and 2 story with story

Federal Government Work (Continued)

wing nurses quarters, rein.-con., at Naval Hospital, here. Noted June 17.

Bids Desired

R. I., Providence—Breakwaters—July 23, by U. S. Engineers Office, repairing breakwaters at Point Judith Harbor; adv. E. N.-R. June 24. Noted June 17.

Pa., Phila.—Dredging—Spec. 5225—July 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging at U. S. Navy Yard, here.

La., New Orleans—Revetment—July 6, by Dist. Engineer, 4th Dist. Mississippi River Comn., 32,000 lin.ft. wooden revetment in Baratria and Lake Borgne Levee Dists., here.

Mo., Rochester—Dikes—July 6, by U. S. Engineer Office, 707 Postal Telegraph Bldg., Kansas City, 2,350 lin.ft. clump dikes on Missouri River, here.

Calif., Los Angeles—Dredging—July 29, by U. S. Engineer Office, 725 Central Bldg., dredging in Los Angeles Harbor; adv. E. N.-R. June 24.

Calif., San Francisco—Rip Rap Stone—U. S. Engineer Office, 85 2nd St., taking bids 1,000 ton rip rap stone.

Bids Received

N. Y., Plattsburg—Remodeling—Treas. Dept. at office Supervising Archt., Wash., D. C., remodeling and enlarging U. S. Post Office and Custom House, here, from Sloan Dickinson Corp., 136 Liberty St., New York City, $14,997. Noted May 27.

South Dakota—Road—J. W. Johnson, dist. engr. Bureau Pub. Rds., Dept. Agriculture, Denver, Colo., grading, etc. 3.55 mi. Deadwood-Hot Springs Project, Pennington Co., from Chaulk & Birdsall, Chadron, Neb., $31,528. Noted May 27.

Colorado—Road—J. W. Johnson, dist. engr. Bureau Pub. Roads, Dept. Agriculture, Custom House, Denver, June 2, grading 3.95 mi. South St. Vrain, Sect. 2, Natl. Forest Rd. Project, Boulder Co., from W. A. Colt & Son, Las Animas, $60,176; and 2.16 mi. Mt. Evans Chicago Creek Sect. Natl. Forest Rd. Project, from Pioneer Constr. Eng. Corp., 504 Denham Bldg., Denver, $52,945. Noted May 27.

New Mexico—Road—J. W. Johnson, dist. engr., 301 Custom House, Denver, Colo., grading, etc. 10 mi. Navajo Canyon Surfacing Sect., Rio Arriba Co., from B. L. and J. L. Morrison, Colorado Springs, Colo., $56,203. Noted May 27.

Contracts Awarded

Mass., Boston—Mezzanine—Treas. Dept., at office Supervising Archt., Wash., D. C., mezzanine floor in U. S. Post Office, here, to A. J. Ross, 120 High St., Boston, $6,200. Noted June 10.

Pa., Pittsburgh—Gates—U. S. Engineer Office, steel lock gates for Lock 5, Allegheny River, here, to Dravo Contg. Co., Neville Island, Pittsburgh, $22,640. Noted May 13.

La., New Orleans—Earthwork—U. S. Engineer Office, 140 Decatur St., 225,000 cu.yd. earthwork, in Lake Pontchartrain Levee Dist., to Odgen & Lewis, Inc., Baton Rouge, $26,708. Noted June 17.

Tenn., Nashville—Houses—U. S. Engineer Office, 3 frame dwellings at Locks B, C and D, on Cumberland River, to Moser Quaintance Co., Lebanon, $22,362. Noted June 17.

Ky., Louisville—Operating Machinery—U. S. Engineer's Office, Box 72, operating machinery for Locks 46 and 49, Ohio River, Lots A and B, to Variety Iron & Steel Wks. Co., Hamilton Ave. and East 40th St., Cleveland, O., $27,900; and Lots C and D, to J. and J. B. Milholland, 714 5th Ave., Pittsburgh, Pa., $12,924. Noted May 13.

Ill., North Chicago — Hospital, etc. — U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., general contract hospital buildings, to N. P. Severin Co., 105 West Monroe St., Chicago, $512,350; plumbing, to Kissel Bros., Hartford, Wis., $15,900, heating to C. A. Hooper, 453 West Gilmar St., Madison, Wis., $44,720; and electrical work, to Harmon Electric Co., 724 South Cicero Ave. Chicago, $17,260. Grand total $590,230. Noted June 17.

Ore., Empire — Compass Station — Spec. 5208 and 5198—Bureau Yards & Docks, Navy Dept., Wash., D. C., Naval Radio Compass Station, to J. Galber, 414 Mutual Life Bldg., Seattle, Wash., $4,458; also wharf and radio masts, to J. W. and J. R. Hillstrom, 1227 North 8th St., Marshfield, $5,925. Noted June 17.

Calif., San Francisco—Wharf—U. S. Engineer Office, wharf at Goat Island, to G. A. Renner, 628 Montgomery St., $9,677.

Unclassified

Proposed Work

Footfield Field and Baseball Diamond—Washington, Conn.—Gunnery School, Inc., H. Gibson, master, making preliminary sketches footfield field and baseball diamond. $25,000. Wilcox Eng. Co., 23 East Main St., Torrington, engrs.

Transmission Line—New York—Niagara, Lockport & Ontario Power Co., Lafayette Bldg., Buffalo, plans transmission line from Cuba to Wellsville.

Boardwalk—Lavallette, N. J.—Boro, H. A. Whitlock, clk., plans boardwalk, ocean front. $50,000.

Swimming Pool, Park, etc.—Tusculum, Tenn. — Bd. Trustees Tusculum College plans swimming pool and athletic park. $50,000.

Concrete Loading Docks—Pontiac, Mich.—See "Buildings—Industrial."

Grand-stand — Chicago, Ill. — Chicago American League Baseball Club, 343 South Dearborn St., C. R. Comisky, owner, having plans prepared by Osborn Eng. Co., 7100 Euclid Ave., Cleveland, O., and takes bids in July, 50,000 seating capacity, steel and rein.-con. grand-stand, here.

Swimming Pool — Chicago, Ill. — See "Buildings—Commercial."

Storage Tank—North Kansas City, Mo.—Larabee Flour Mills Corp., Security Bldg., Kansas City, plans 750,000 bu. rein.-con. storage tanks. Engineer not selected.

Breakwater — Santa Monica, Calif. — Plans election $2,000,000 bonds, 5,900 ft. breakwater, concrete bulkhead and wharf. H. B. Carter, city engr.

Swimming Pool—Bridgeburg, Ont.—See "Buildings—Educational, Religious."

Bids Desired

Grandstand and Field House—Brookline (br. Boston) Mass.—June 29, by Park Comrs., Town Hall, concrete and timber grandstand and field house, Pond Ave. $25,000 or more. Private plans.

Electrical Equipment—New York, N. Y.—July 20, by New York State Bridge & Tunnel Comn. and New Jersey Interstate Bridge & Tunnel Comn., Woolworth Bldg., equipment for lighting tunnels, approaches, plazas, ventilating buildings, etc.; also for traffic signals, telephones, etc., Contr. 19 of Holland Tunnel. T. Boettger, chn. of former, and G. R. Dyer, chn. latter commissions.

Platform Extensions—New York, N. Y.—July 7, by Bd. Transportation, J. H. Delaney, chn., 49 Lafayette St., platform extensions to Stations of Bway.-4th Ave. Rapid Transit R.R.

Hull—Syracuse, N. Y.—June 30, by T. F. Farrell, comr. Canals & Waterways, Albany, steel dredge hull, at Barge canal terminal, here; adv. E. N.-R. June 24.

Stadium — Chester, Pa. — June 22, by Savery & Scheetz, archts., St. Girard Bldg., Phila., 1 story, 48 x 327 ft., rein.-con., brick and limestone, plain foundation, college ground, here, for Pennsylvania Military College, c/o H. H. Ward, Chester. Noted June 10.

Swimming Pool—Cleveland, O.—July 2, by City, swimming pool at Woodland Hills Park. $200,000. H. Kregelius, 604 City Hall, archt.

Swimming Pool—Benton Harbor, Mich.—See "Buildings—Commercial."

Culverts—Newton, Ia.—See "Bridges."

Culverts—Rock Rapids, Ia.—See "Streets and Roads."

Ornamental Lighting System — Los Angeles, Calif. — July 6, by Supervs. Los Angeles Co., ornamental street lighting system on Albright Ave., etc., Co. Impvt. 539; and Altadena St., etc., Co. Impvt. 536. To exceed $25,000.

Ornamental Lighting System — Upland, Calif. — July 1, by City Trustees, ornamental street lighting system on various streets. To exceed $25,000. R. G. Manley, 326 East 9th St., engr.

Turbo-Generator — Moose Jaw, Sask. — Aug. 16, by City Comrs., City Hall, W. W. Davidson, mayor, 5,000 kw. steam turbo-generator and 1 surface condenser. W. W. Davidson, mayor; adv. E. N.-R. June 24.

Bids Received

Ferryboats—New York, N. Y.—A. Goldman, comr. Plants & Structures, Municipal Bldg., steel screw ferry boats, (A) alternate on Ingersoll Rand Engines, from Todd Dry Dock Eng. & Repair Co., 25 Bway., 1 boat $236,548 (A) $232,600; 2 boats $224,500 (A) $220,500; and 3 boats $224,500 (A) $220,500. Noted June 10.

Dumping Platforms, etc. — New York, N. Y. — Commissioner Dept. Docks, Pier "A," North River, dumping platform, ramps, etc., granite and asphalt block paving, etc. from Werner Mitchell Co., 1 DeKalb Ave., Brooklyn, $49,897; plumbing, etc. from Altman Plumbing Co., 219 East 25th St., $3,085. Noted June 17.

Subway—Phila., Pa.—Dept. City Transit, 1211 Chestnut St., June 16, special track work, channels and appurtenances for Broad St. Subway, Contr. 124, from W. Wharton, Jr. & Co., Inc., Weidener Bldg., Phila., $288,781. Noted May 27.

Heating and Ventilating—Detroit, Mich.—Pub. Lighting Comn., 174 East Atwater St., heating and ventilating system, etc., in Morrell St. power station, from Johnson-Larson Co., 693 Monroe St., 656,775. Noted May 20.

Foundation—St. Louis, Mo.—See "Excavation, Drainage, Irrigation, Levees, River and Harbor."

Contracts Awarded

Dock and Bulkhead—West Lynn (Ind. sta. Lynn), **Mass.**—Lynn Gas & Electric Co., Exchange St., Lynn, 1 story, 50 x 65 ft. timber dock and bulkhead, Broad and Shepard Sts., here, to Bay State Dredging & Contg. Co., 62 Condor St., Boston. Engrs. est. $200,000.

Tank Shed — Winchester, Mass. — J. O. Whitten Co., 2 story, 26 x 160 ft. tank shed, to A. P. Rounds, Stoneham Sq., Stoneham. Archts. est. $50,000.

Tow Boat—Albany, N. Y.—T. F. Farrell, supt. Bureau Canals & Waterways, steel screw motor tow boat, at Barge Canal Terminal, to Rice Bros. Corp., East Boothbay, Me., $37,950. Noted June 10.

Boardwalks, etc. — Fire Island (mail Babylon), **N. Y.**—Long Island State Park Comn., 302 Bway., New York City, 2,680 ft. or more standard boardwalks, bath house, etc., at Fire Island Park, here, to R. A. Lewis, Huntington, $29,000.

Abutment—New York, N. Y.—New York Central R.R., Grand Central Terminal, north abutment incl. wing wall, at West 137th St., to P. T. Cox Contg. Co., 154 Nassau St., $95 000.

Cement Bins — Duluth, Minn. — Duluth Universal Portland Cement Co., Morgan Park, Minneapolis, constructing nine 10,000 bbl., rein.-con. storage bins, to Bland Eng. Co., corner N.E.L. and Kennedy St., Minneapolis.

Ornamental Lighting System—Burbank, Calif.—Ornamental street lighting system on San Fernando Rd., to Robertson Electric Co., 303 Main St., Santa Ana, 028,985.

Underground Cables — Montreal, Que.—Corporation of Montreal, underground cables, to Northern Electric Co., Ltd., 121 Shearer St., $531,119.

Viaduct — Toronto, Ont. — Toronto Terminals Ry. Co., New Union Sta., 1,000 ft. viaduct, to P. Lyall & Sons Constr. Co., 120 St. James St., Montreal, Que., $1,500,000. This corrects item in June 17 issue.

Materials

Bids Desired

Cement—New York, N. Y.—June 29, by H. Bruckner, pres. Bronx Boro, Crotona Park, 3rd and Tremont Aves., 3,000 bags portland cement.

Timber—Milwaukee, Wis.—June 29, by Central Bd. Purchases, City Hall, 3,170 ft. untreated, 22,230 ft. white oak planking, also 27,141 ft. yellow pine creosoted timber, for Holton St. Bridge (now under construction).

Bids Received

Cable — Boston, Mass. — City, Supply Dept., lead covered cable for Fire Dept., from Hazard Mfg. Co., Wilkes-Barre, Pa., $10,340. Noted June 3.

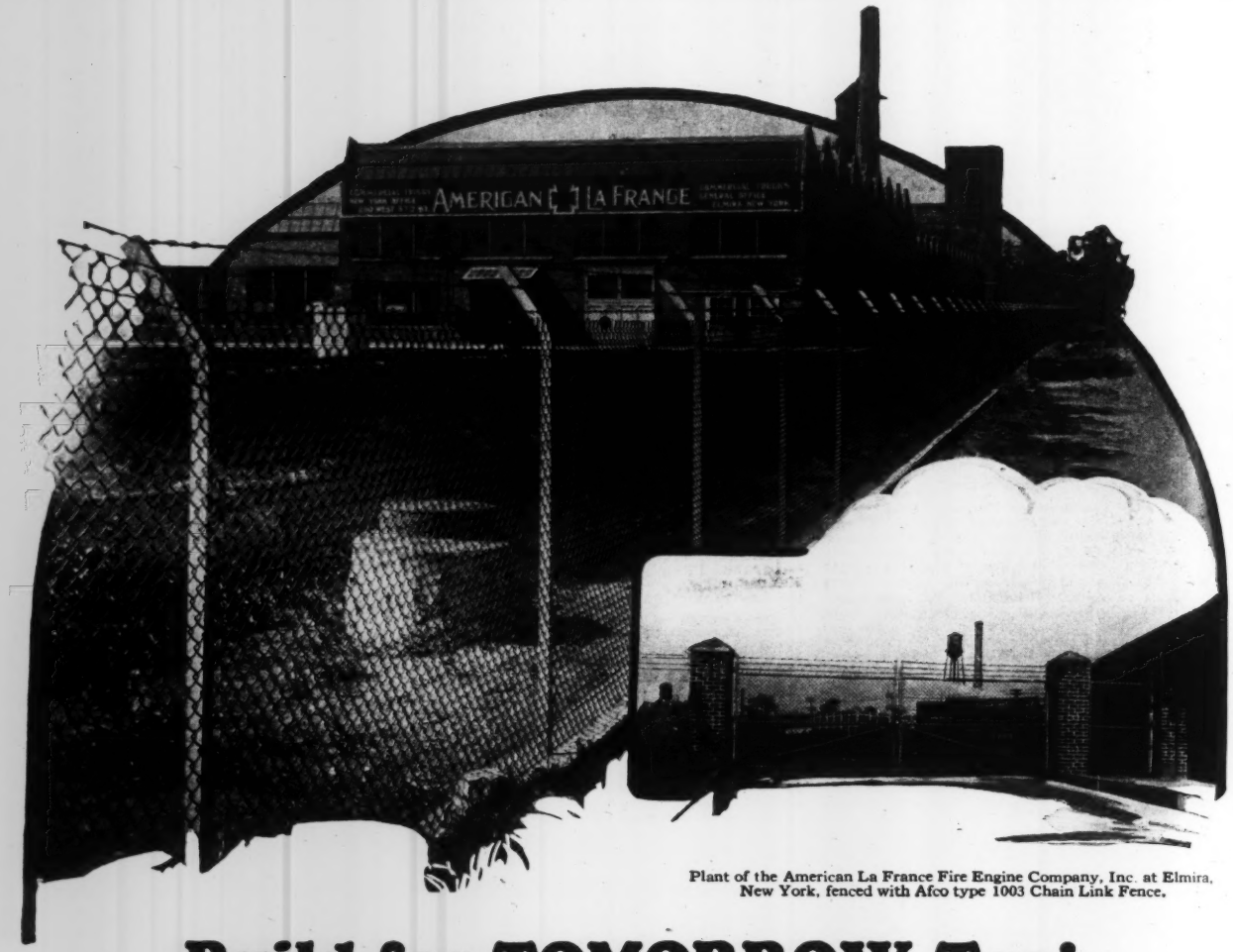
Tar — Trenton, N. J. — Bd. Freeholders Mercer Co., 18,500 gal. hot tar for 4 roads, from Barrett Paving Co., Trenton Trust Bldg., $0.159.

Contracts Awarded

Refined Tar—Minneapolis, Minn.—F. S. Gram, city purch. agt., 150,000 gal. refined tar, to Barrett Co., 1 19th Ave. S. Spec. A $0.129 per gal., B $0.113, C $0.12) and D $0.169. Noted June 3.

See proposal advertising on page 137

Constr. News page 411



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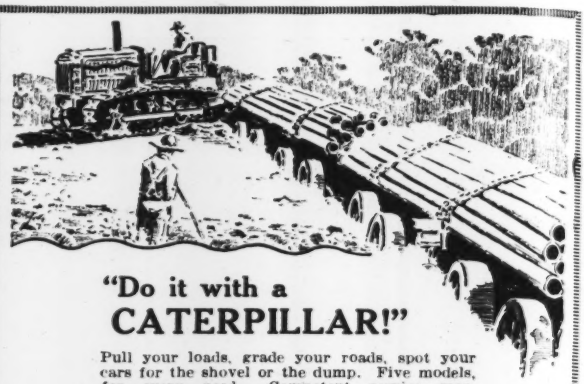

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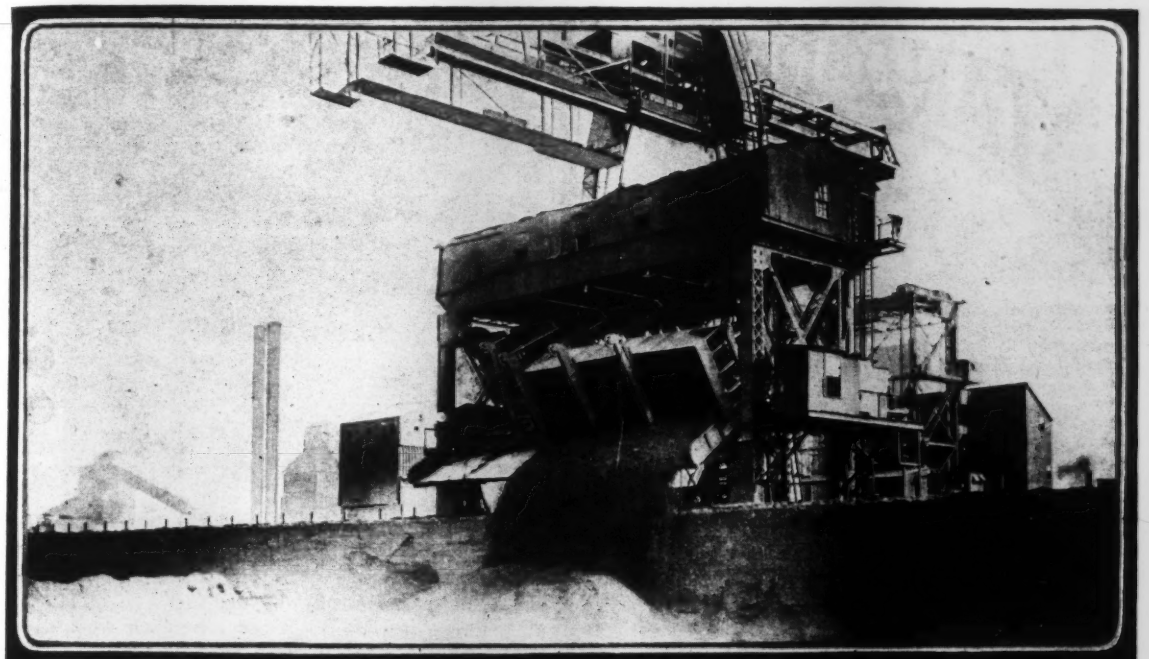

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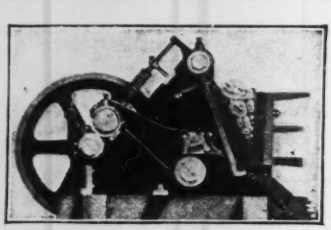

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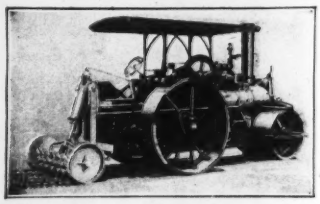

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"Build it with METAFORMS"

Metaforms save a lot of money for contractors building straight wall work, but when the job includes circular walls the saving is even greater.

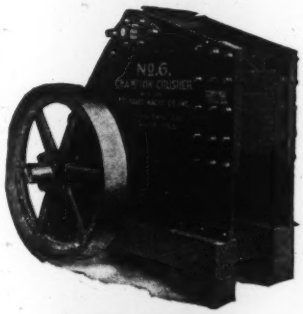
Metaforms are uniform steel units, strongly reinforced, and equipped with sturdy clamping devices. With these units a form of almost any size, shape or thickness can be easily set up.

All the waste of lumber, costly labor, and delayed pouring are eliminated with Metaforms.

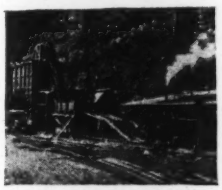
METAL FORMS CORPORATION
Milwaukee, Wisconsin

Good Roads Portable Rock Crushing Plant used by town of Warwarsing, New York

Easy to set up . . . to operate . . . to move



Good Roads Champion Rock Crusher No.6



No. 6 Champion Rock Crushing Plant of John J. Guinan Contracting Co., Brooklyn, N.Y. Plant used in State Highway construction work.

Good Roads Portable Rock Crushing Plants are ideal for towns—townships—counties, and contractors. The ease with which they can be set up, operated, and moved, together with their all-around efficiency insures the most economical and practical results. They allow townships and boroughs to keep within their appropriations, and contractors to increase their profits.

Good Roads Portable Rock Crushing Plants

Good Roads Portable Rock Crushing Plants are made in two types—Champion and Climax—consisting of Rock Crusher, Mounting Elevator, Revolving Screen, and Bin. Portable plants are made in various sizes up to 300 tons daily capacity. These outfits are models of convenience and thousands are now in use, making profits for contractors and saving money for tax payers. Our Crusher Catalog K.A.U. gives detailed information. Write for it today!

EVERYTHING FOR THE ROAD MAKER

Road Graders
Road Drags
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Heating Kettles
Rock Crushers
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Write for 1926 Catalog

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TRADE MARK

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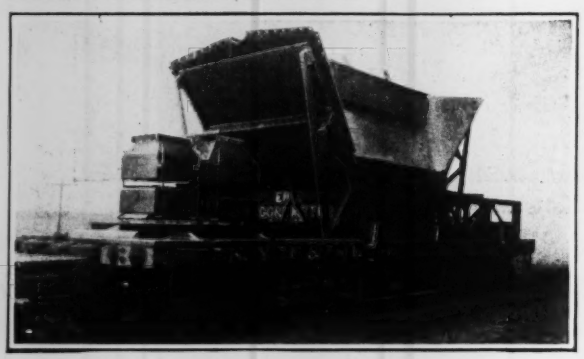
Good Roads MACHINERY

ERIE TYPE "F" Aggre Meter

CAPACITY
47 and 78
Cubic Yards
(70 and 117 tons)

Semi-assembled—Easy to ship
Put up anywhere quick!



This is the ideal plant for proportioning and loading direct into mixer hopper, or compartment trucks, or batch boxes. Made (1) of all steel or (2) with steel frame for wood lining. Two or three men can erect it or take it down in a few hours and one man can operate it—economy!

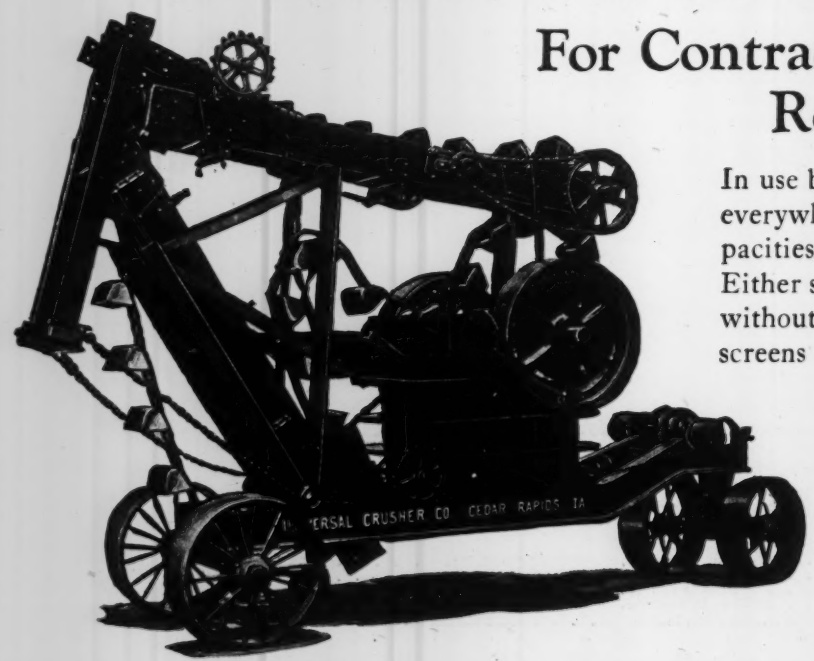
Write us. We make 5 types of Aggre-Meters for every kind of job. Bulletins on request.

We also make ERIE BUCKETS

ERIE STEEL CONSTRUCTION CO.
ERIE, PENNSYLVANIA, U. S. A.

UNIVERSAL ALL STEEL CRUSHERS

For Contractors and Road Builders



In use by rock and gravel producers everywhere. Twenty sizes with capacities 25 to 450 tons in 10 hours. Either stationary or portable with or without elevators, conveyors and screens to meet individual needs.

Equipped with best quality reversible manganese steel jaws, heavy high carbon steel shaft, bronze bearings, ring oilers, safety toggle and instant adjustment for setting the jaws to produce either fine or coarse material. The simplest and most dependable rock crusher built. Thousands in use.

20 years of crusher manufacturing and designing skill at your service.

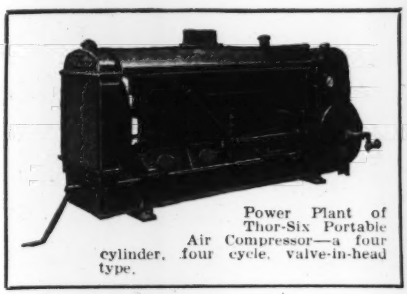
UNIVERSAL CRUSHER COMPANY 633 C Avenue West, Cedar Rapids, Iowa

Thor

Compressor Outfits and Contractors' Tools

Thor-Six Portable Air Compressor

—equipped with the Rix Patented Super-Charger, which increases AIR DELIVERED 40%.



Power Plant of Thor-Six Portable Air Compressor—a four cylinder, four cycle, valve-in-head type.

Making paving repairs with Thor Paving Breakers. This small crew is doing the work quicker, cheaper, and better than could a large gang with bull points and sledges.

Thor Paving Breaker

—strictly a one-man tool.

CONTRACTORS must use labor-saving tools wherever possible. The "pick and shovel" gang is obsolete. Better, faster, and cheaper methods are needed. Companies doing their own work, also need modern tools, improved methods and the smallest possible amount of hand labor.

With these facts before them, the Independent Pneumatic Tool Company has developed the Thor Portable Air Compressors and Thor Contractors Tools. Such tools as the Thor Paving Breaker, Thor Trench Digger, Thor Calking Tool for Lead Joints and Thor Backfill Tamper, used in connection with a Thor Portable Air Compressor will enable you to complete your contract on time and at the lowest possible cost. Two men often do the work of ten.

Why not have our Engineer call and make recommendations for your next job?

Thor Calking Hammer

for calking around joints of sewer pipes, gas mains, water mains, etc.

Thor Backfill Tamper

Thor Trench Digger

for excavating, tunnel and trench work.

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"averaging 1200 feet of trench main per day—Can't keep up with ditcher."

The Baby Digger fills an important need in gas main and conduit subway work.
It weighs less than 4 tons and is the outcome of years of experience in development. A machine to work in cramped places, close to poles or buildings —or—on sidewalks and lawns.

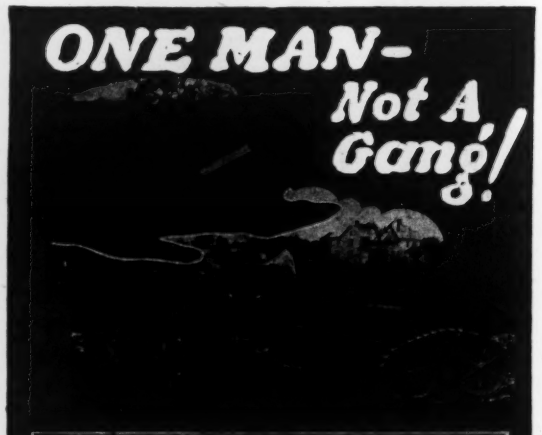
Range { Width 10.5 in. to 23 in.
Depth to 5 ft. 6 in.

The specifications will interest you. Send for them.

The Cleveland Trencher Co.
Pioneers of the Small Trencher
20100 St. Clair Ave. Euclid, Ohio

THE BABY DIGGER
REGISTERED

ONE MAN—Not A Gang!



ONE salary—not a payroll. That's H. P. economy. The H. P. "One Man" Grader with attachments effects a saving of as high as 80% of road cost in scarifying, scraping and rolling which is done in one operation.

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Concrete Pipe

Plain and Reinforced for Water, Sewer and Subaqueous Work.

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"It lasts forever"

Made of pure Alabama pig iron. One man handles and installs it. Lengths, 3 ft. 3 in. Standard corrugations. **Lighter but stronger than plain pipe.**

Investigate this everlasting lock-joint culvert pipe.

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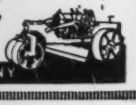
Grader, Roller and Scarifier all with one power plant. Saves cost of two Fordsons. Write for particulars.



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TONCAN COPPER Mo-lyb-den-um IRON

INVESTIGATE THIS IRON

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Corrugated Culverts
"ACME" (Nestable) and "IMPERIAL"
Riveted Corrugated Culverts
Made of Toncan Copper Molybdenum Iron. Write for prices.

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Made by the patented Nichols centrifugal process, for sewers, culverts and hydraulic pressure lines.

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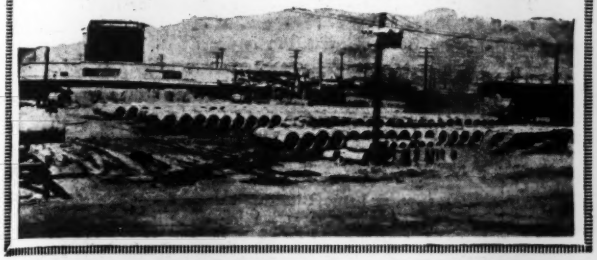

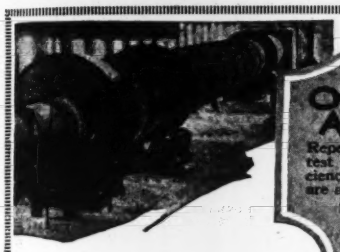

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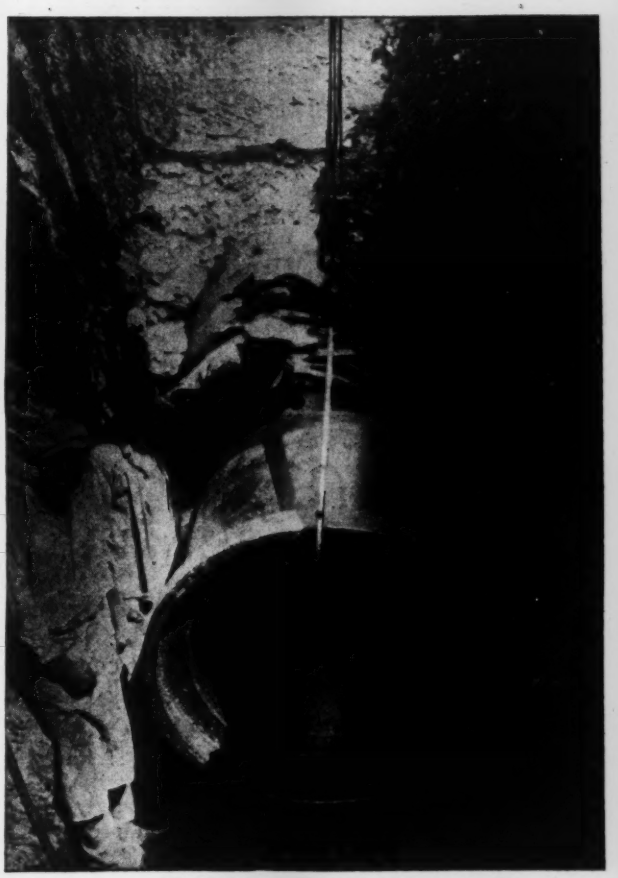
Write for latest Bulletins.

VULCAN of WILKES-BARRE **KILNS**



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NON-BREAKABLE QUICKLY PLACED CANNOT SLIP.

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VITRIFIED Salt Glazed CLAY
Sanitary Sewer Pipe

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PROTEXOL NEWS
MORE LIVES FOR TIMBER

Facts need not be stubborn—they are not controversial.

The picture above offers mute yet convincing testimony of careful study of the subject of wood preservation.

This collection embraces 115 specimens from thirty states, twenty-four different industries, twenty-three different species of wood and forty-four uses of timber. It represents industrial research on an engineering subject.

This study of results obtained from the use of Surface Treatments with Protexol Wood Preservative illustrates but one activity of an organization now celebrating its Golden Jubilee Year.

Surface Treatments are of three kinds: brush, spray or open tank. Specifications covering them are available from National Engineering Associations. They have demonstrated their value for the preservative treatment of structural timber where the maximum protection is required for framed surfaces.

Complete specifications covering treatment, layout of equipment or cost estimates will be prepared upon request.

This service accentuates the fact that wood preservation represents a capital investment. The subject of Annual Charge is covered by Bulletin 40 which details many of the specimens shown in the above photograph. It may be had upon request.

Can you afford not to treat structural timber after framing?

Wood Preservers Since 1878

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Ties—Lumber—Piles—Poles—Cross Arms for Railroads, Bridges, Docks, Fences, and other purposes where permanent construction is required.

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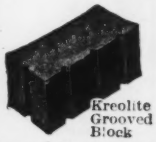
KREOLITE WOOD BLOCK FLOORS

"Outlast the Factory"

An excellent investment for machine shops, loading platforms, foundries, warerooms, pickling rooms and other parts of the plant where the floors receive hard wear.

Write today for our booklet—
"Kreolite Factory Floors."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Railroad Ties, Bridge Timbers, Piles, Poles, Paving Blocks and Lumber—Manufacturers of Cross Arms Signal Trunking and Wyckoff Conduit for Underground Wires.

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Established 1881
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Creosote Oil
Docks for Ocean Vessels

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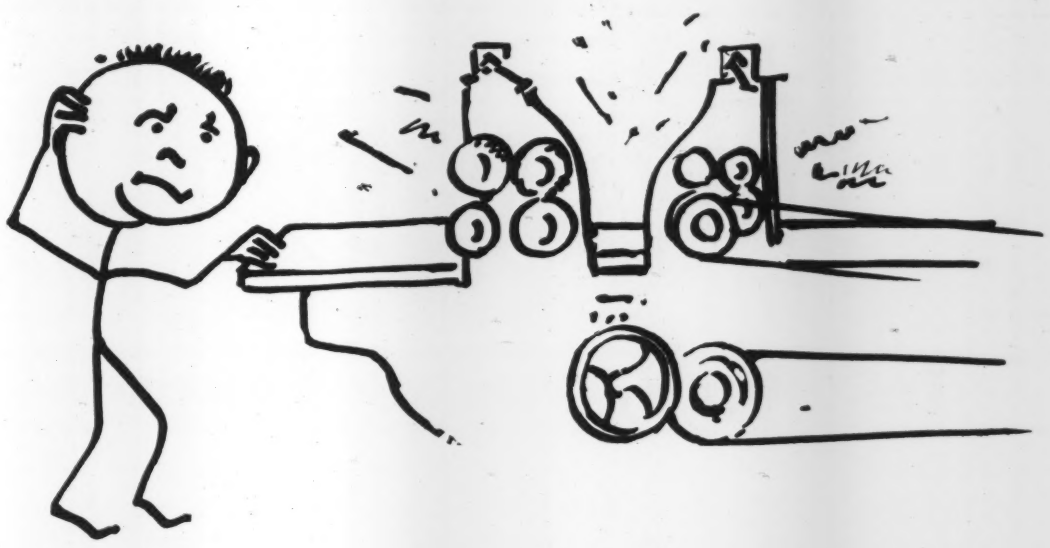

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Don't let the mill give you STANDARD Lumber, minus the extra strength, stiffness, warp-resistance and coverage that you ought to have. Specify SUPERstandard. It's finished 1/32 in. thicker and ⅛ in. wider than regular standard. In consequence, on say 1 in.x3 in. boards, it gives 5.26% more coverage, is 8% stronger, 12% stiffer and 8% more warp-resisting.

Specify SUPERstandard
and we will leave it on for you!

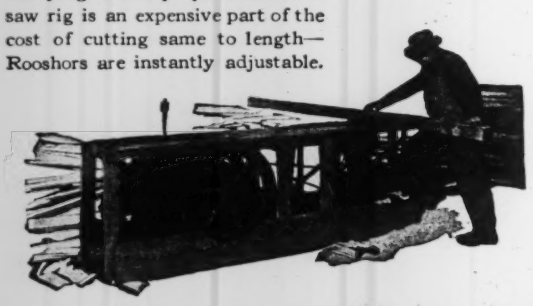
Demand this BRAND

"An Inch for an Inch and a Foot for a Foot"

SELF-LOCK
ROOSHOR
ADJUSTABLE

Instead of Timber Props

Carrying timber props to and from saw rig is an expensive part of the cost of cutting same to length—Rooshors are instantly adjustable.



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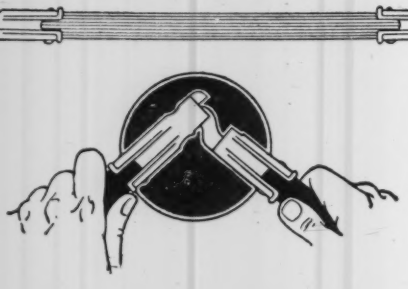

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FELTON'S
ROD COUPLINGS

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CALCASIEU

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When you build for permanence, put long leaf where strength is needed, and where the wind and weather hits.

Timbers, flooring, studding, joists, rafters, built of long leaf pine, are an investment for the future.

In breaking strength, crushing strength and stiffness, Long Leaf Pine surpasses all other American woods (see U. S. Govt. Agricultural Bulletin No. 99.)

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PUT your sash operating problems up to us.

For every type of window, and problem we either have an apparatus or will design one.

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"For Safety's Sake"

SPECIFY UNIVERSAL

for all stairways, runways, and leading platforms —wherever wear is excessive, or danger from slipping feet exists.

Its lead base makes it non-rusting, non-chipping, and silent.

Impregnated through and through with diamond hard crystals, it retains its anti-slip qualities to the last fraction of an inch, and lasts for years regardless of punishment.

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PEELLE Freight Elevator DOORS
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Universal Form Clamps can be applied economically on all concrete work, reducing the cost of tying forms fully 50%. They assure accurate forms, and by preventing spreading save many extra yards of concrete.

Universal Clamps can't slip. They are easy to place and to remove.

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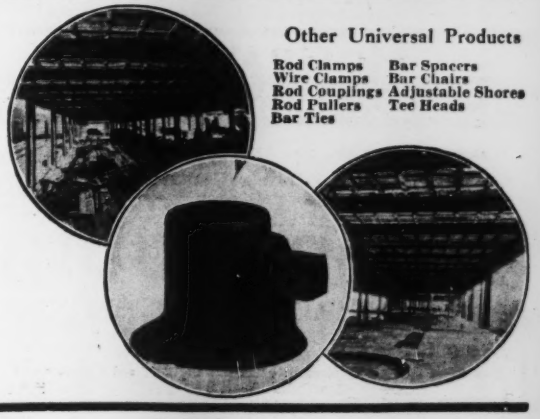

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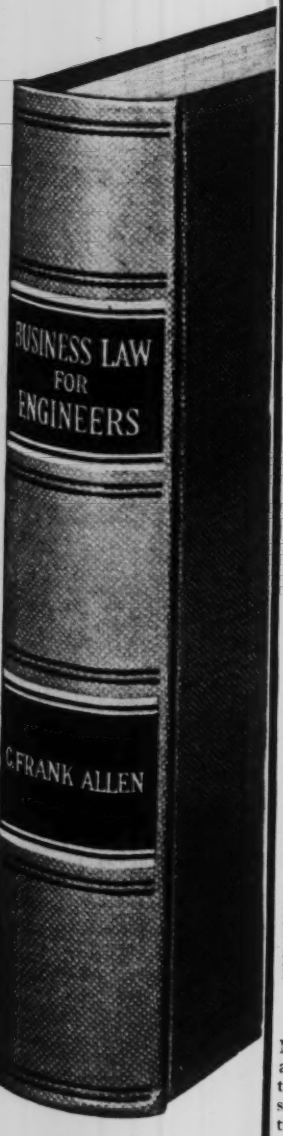
Should be on every engineer's book-shelf



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The Legal Side of Engineering

—and what you should know about it.

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By C. FRANK ALLEN,
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3. Contracts
4. Torts.
5. Equity.
6. Real Property
7. Corporations
8. Agency—Master and Servant
9. Sales
10. Negotiable Instruments
11. Railroads
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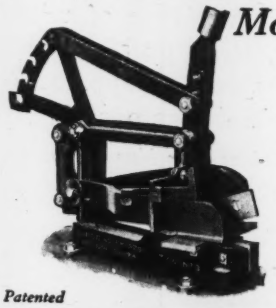

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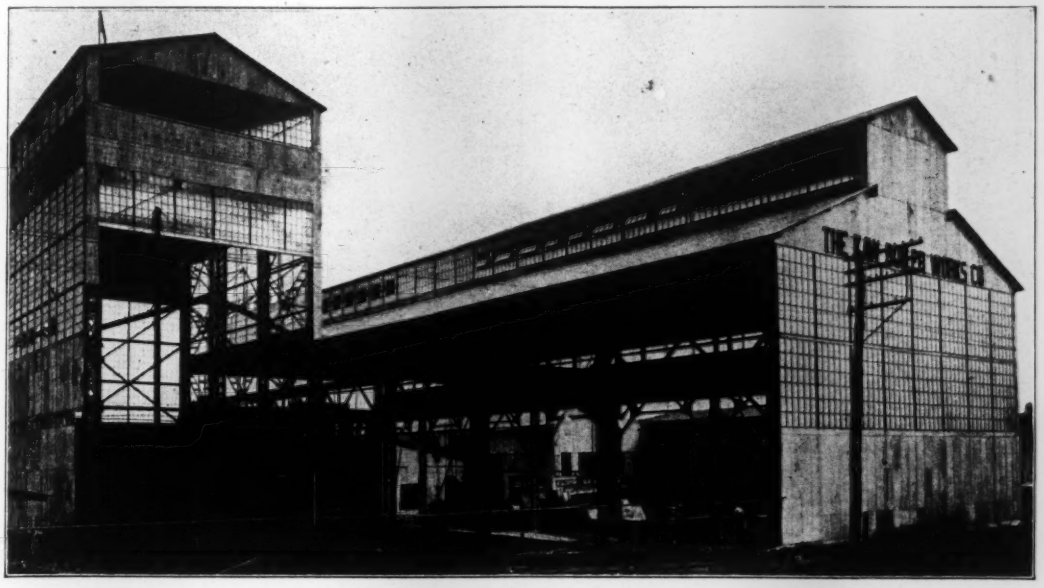

The Kaw Boiler Works Co., Kansas City, Kansas, used 36 tons of Galvanized, Corrugated ARMCO Ingot Iron for roofing, siding and flashing on this mill building.

DURABLE and ECONOMICAL

Used All Over the World

Hundreds of industrial buildings are protected against rapid corrosion by purer, rust-resisting ARMCO Ingot Iron.

This iron is widely used by engineers because of its stamina under the attack of salt water, coal smoke, and sulphurous fumes. It resists corrosion because it is virtually free from the rust-promoting impurities.

Divide the original cost of ARMCO Ingot Iron roofing and siding by its average number of years of service. Result: A low cost per service year. Although the original cost of "The Purest Iron Made" is a little higher, it is well worth the additional amount.

This roofing can be fastened direct to the purlins. Sheathing expense is eliminated.

Ask our service engineers to help you solve intricate problems.

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MIDDLETOWN, OHIO
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Cable Address: ARMCO, Middletown

ARMCO TRADE MARK **INGOT IRON**
The Purest Iron Made

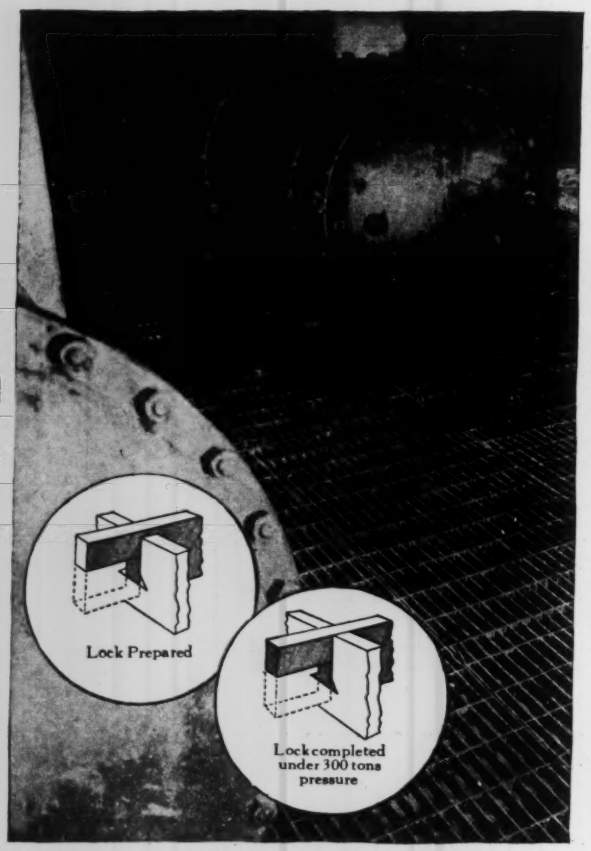

Illustration shows MITCO Grating around the Feed Water Heaters in the Super-Power Station of the Ohio River Edison Company, Toronto, Ohio. Designed and constructed by Stevens & Wood, Inc., New York City.

MITCO
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Interlocked STEEL GRATING

The Flooring for Safety and Permanence

There are many advantages to MITCO Interlocked Steel Grating as a flooring material for industrial plants. It is non-clogging and non-slipping. Oil, grease or water do not make it slippery. MITCO Interlocked Steel Grating stands the strains and stresses of heavy loads. It provides excellent traction for wheeling and trucking and assures safety under foot. Constructed entirely of steel, it means permanence in flooring.

Light and air can penetrate to spaces beneath the floor. Due to a special "lock joint" feature, rivets and welding are entirely eliminated in the construction of MITCO Interlocked Steel Grating. It will pay you to investigate its advantages for your plant. Write to us.

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New York Office: 15 John St. Phone Cortland 2440
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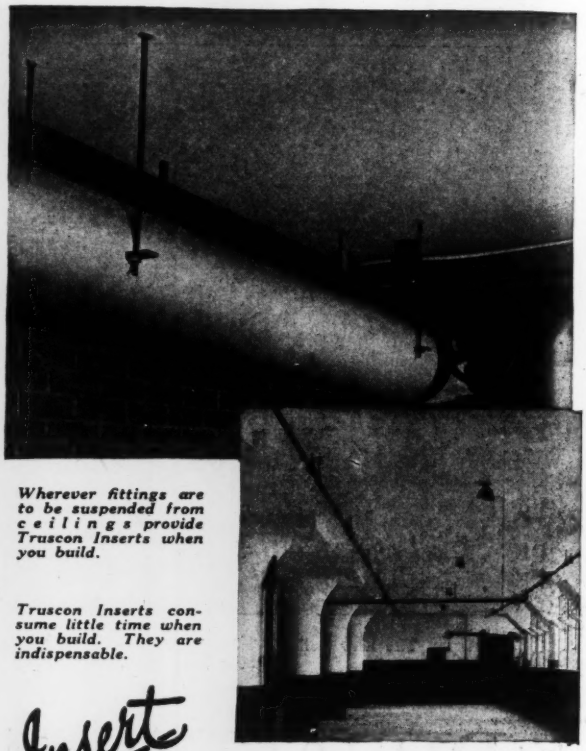

Wherever fittings are to be suspended from ceilings provide Truscon Inserts when you build.

Truscon Inserts consume little time when you build. They are indispensable.

Insert Truscon Inserts

Truscon Tapped Insert where exact locations are known.

Truscon adjustable Inserts allow moderate range of adjustment.

Avoid the extra labor and the greatly increased costs that come with drilling into concrete to make piping and fitting attachments. Put Truscon Inserts in place when the concrete is poured. It's very simple and it saves you much. Truscon manufactures three types, tapped, adjustable and slotted to meet any requirement.

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The Truscon Laboratories, Detroit, Mich.
Trussed Concrete Steel Co. of Canada, Ltd., Walkerville, Ont.

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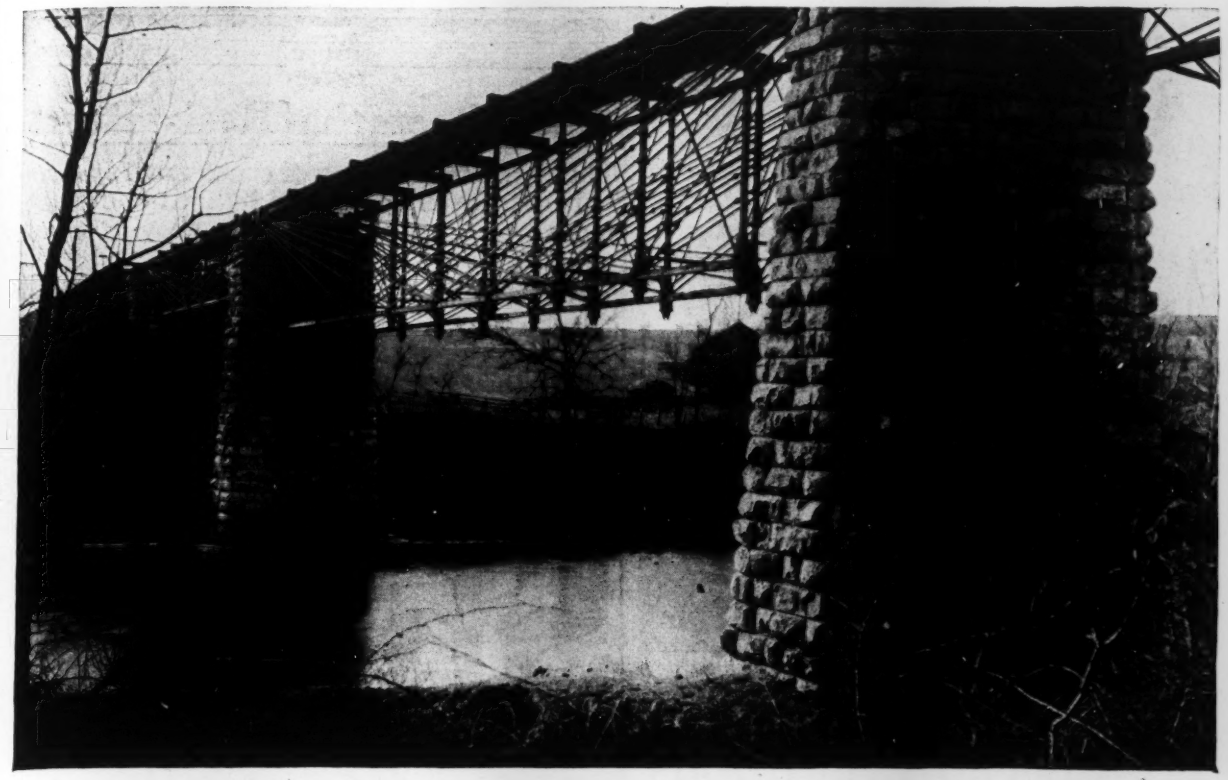

Old Bridge in Shenandoah Valley, Va., built in 1872-73 by the Baltimore and Ohio Railroad. This, with two other bridges of equal age, remained in service over half a century without reinforcement or repair. The WROUGHT IRON members showed no loss of section through corrosion, although they had not been painted for 23 years.

50 Years Old---
No Paint in 23 Years---

yet corrosion did no harm!

SUCH is the record of the genuine wrought iron members on this old bridge in the Shenandoah Valley, Va., described by P. G. Lang, Jr., Engineer of Bridges, Baltimore & Ohio Railroad. Such performance is characteristic of wrought iron—the kind of metal which has always been used in the manufacture of Byers Pipe.

In buildings of every character; on railroad cars and locomotives; in power plants, factories, mines; under and above ground, Byers Pipe when used for conveying water, steam, and other fluids shows the same astonishing resistance to corrosive attack.

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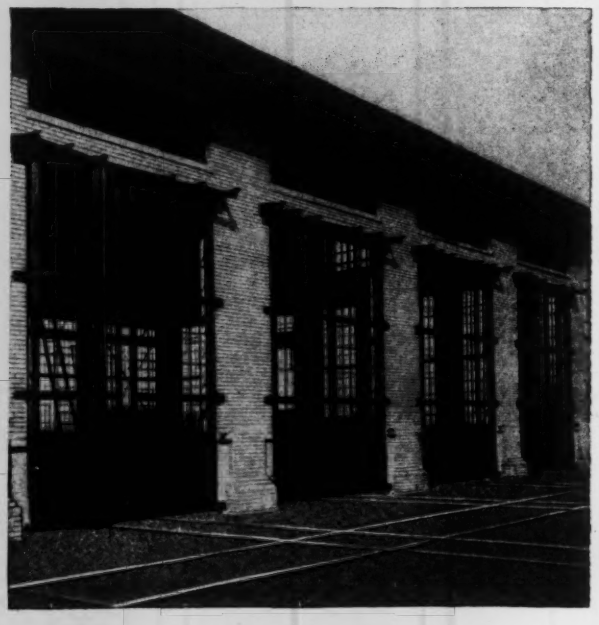

Truscon Steel Doors For Special Conditions

When you have special conditions that require doors of unusual design, let Truscon Engineers assist you. The illustration above shows mammoth, folding type Truscon Steel Doors manufactured to meet special requirements of the Santa Fe Railroad Shops. They are typical of Truscon's ability and facilities for Steel Door design and manufacture. Always unusual strength, rigidity, permanence and fire-safety.

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Standard sizes of Truscon Steel Doors (swinging or sliding types) are adapted to all industrial and commercial buildings as well as garages, service entrances, furnace rooms, etc. Their strength, permanence, sturdiness and high quality are outstanding features. Large scale production makes their cost exceptionally low.

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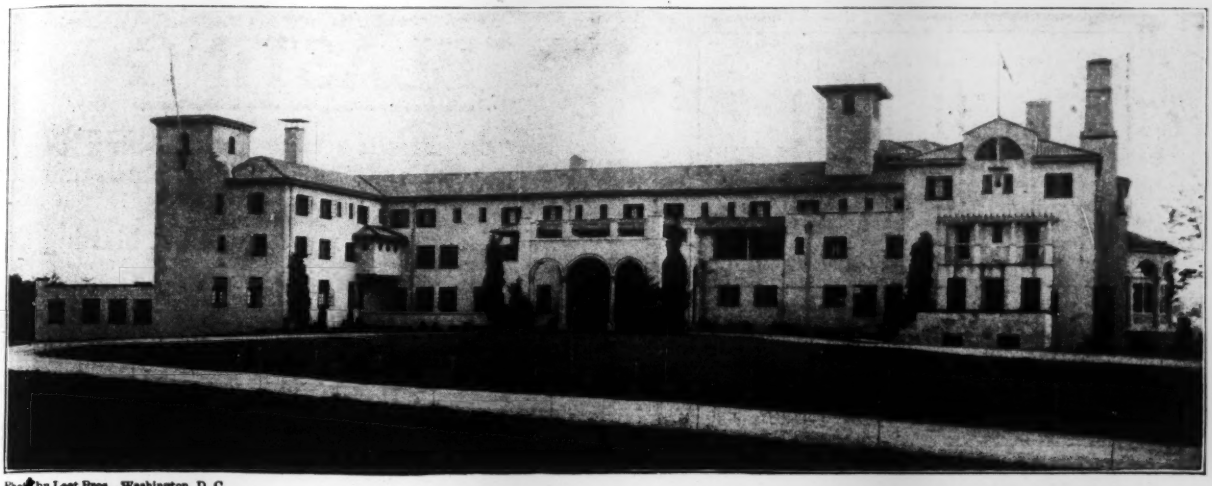

Photo by Lost Bros., Washington, D. C.

Congressional Country Club, Washington, D. C.
Contractor, M. Serretto, Washington, D. C.
Architect, Philip M. Jullien, Washington, D. C.

Permanent!

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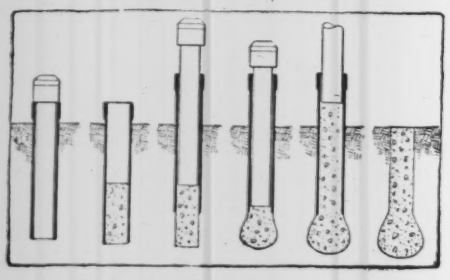

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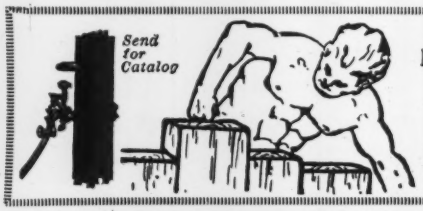

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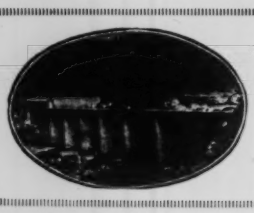

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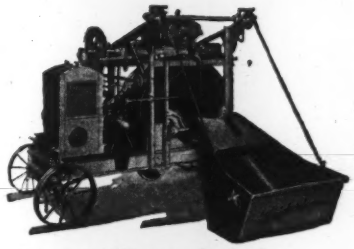

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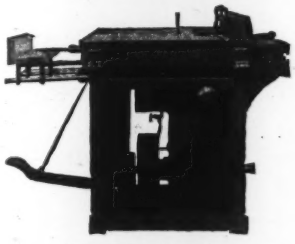

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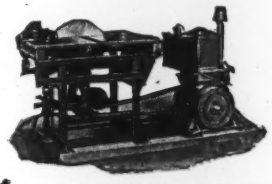

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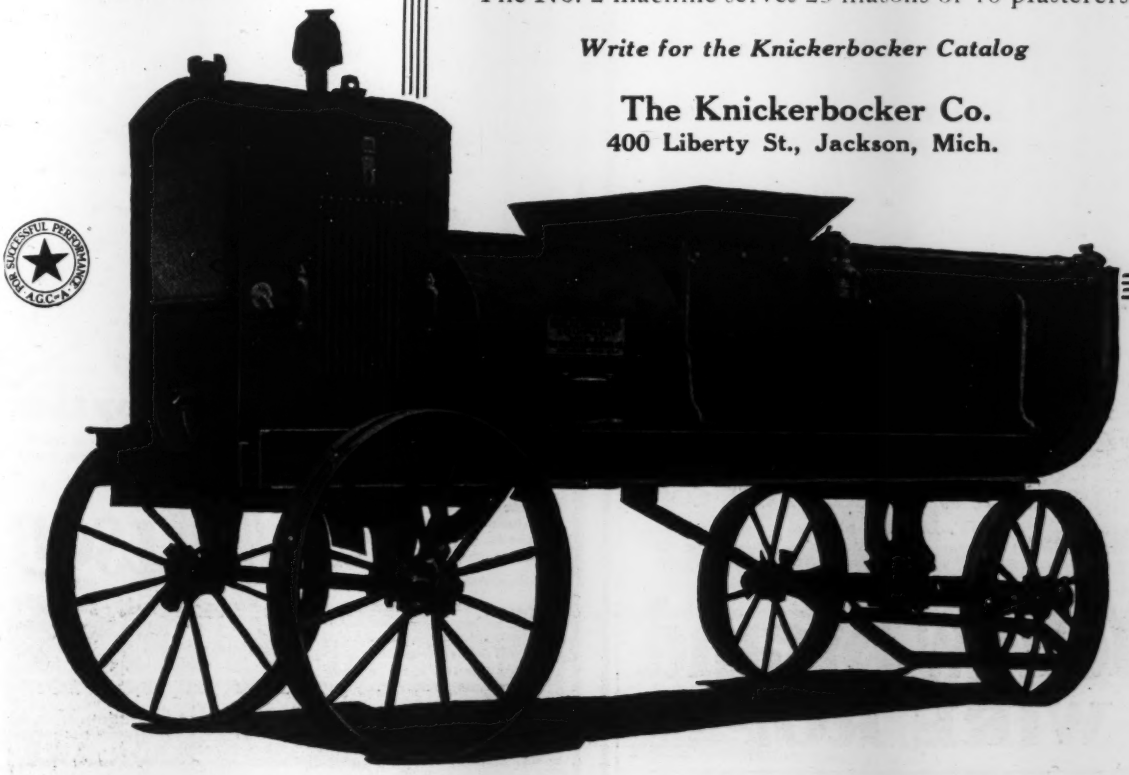

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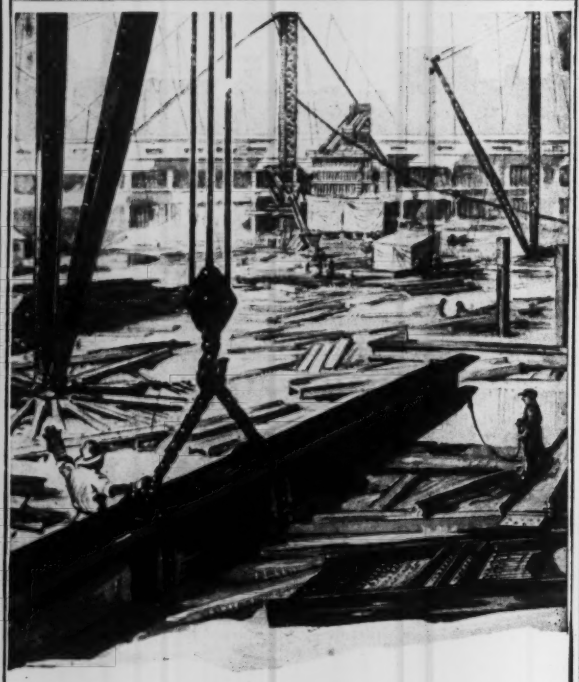

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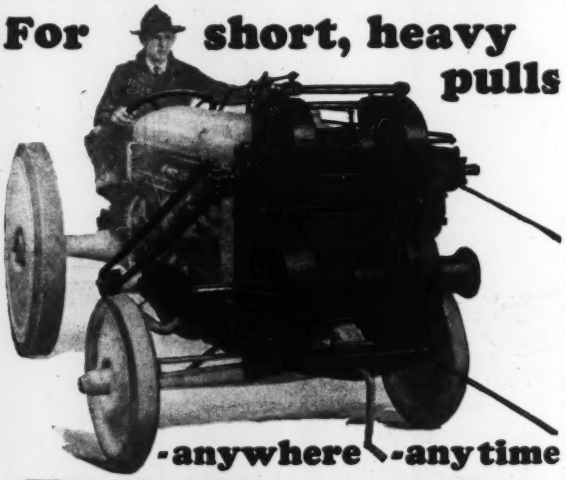

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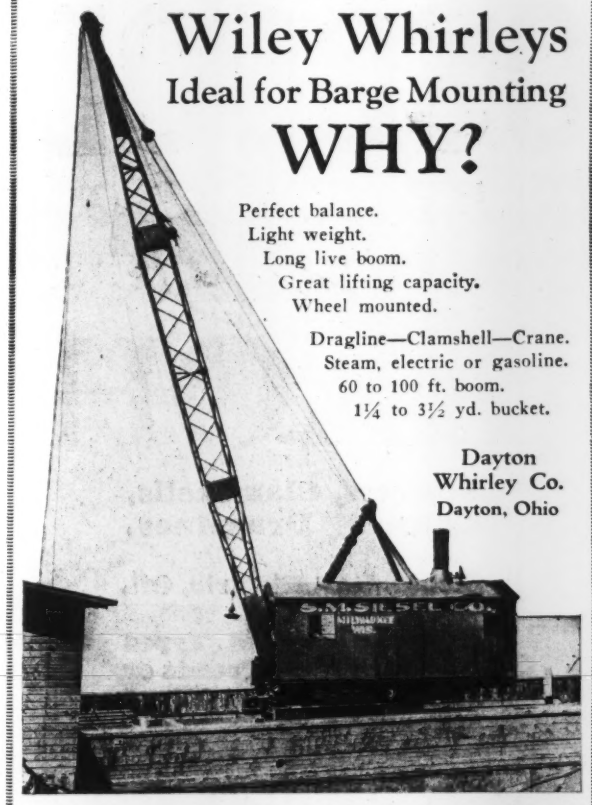

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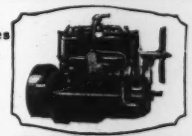

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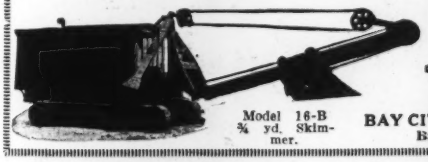

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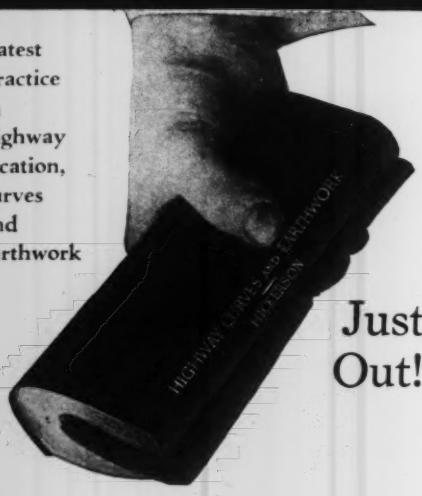

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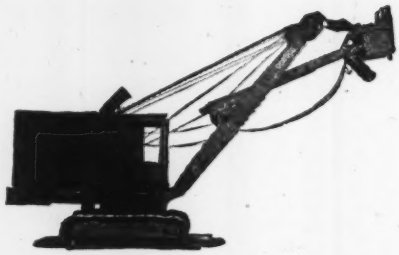

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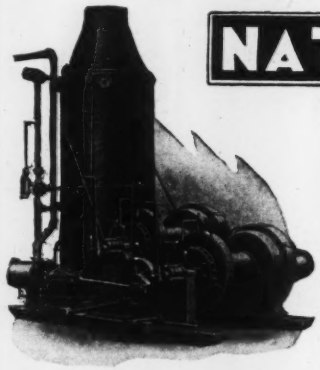

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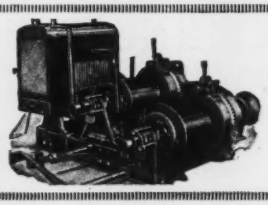

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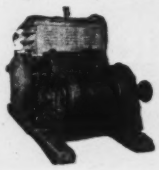

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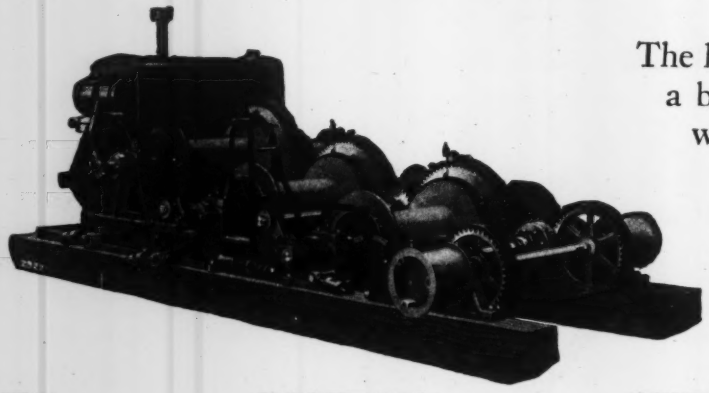

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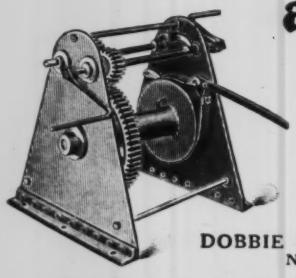

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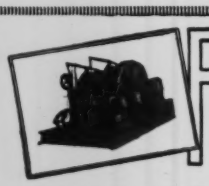

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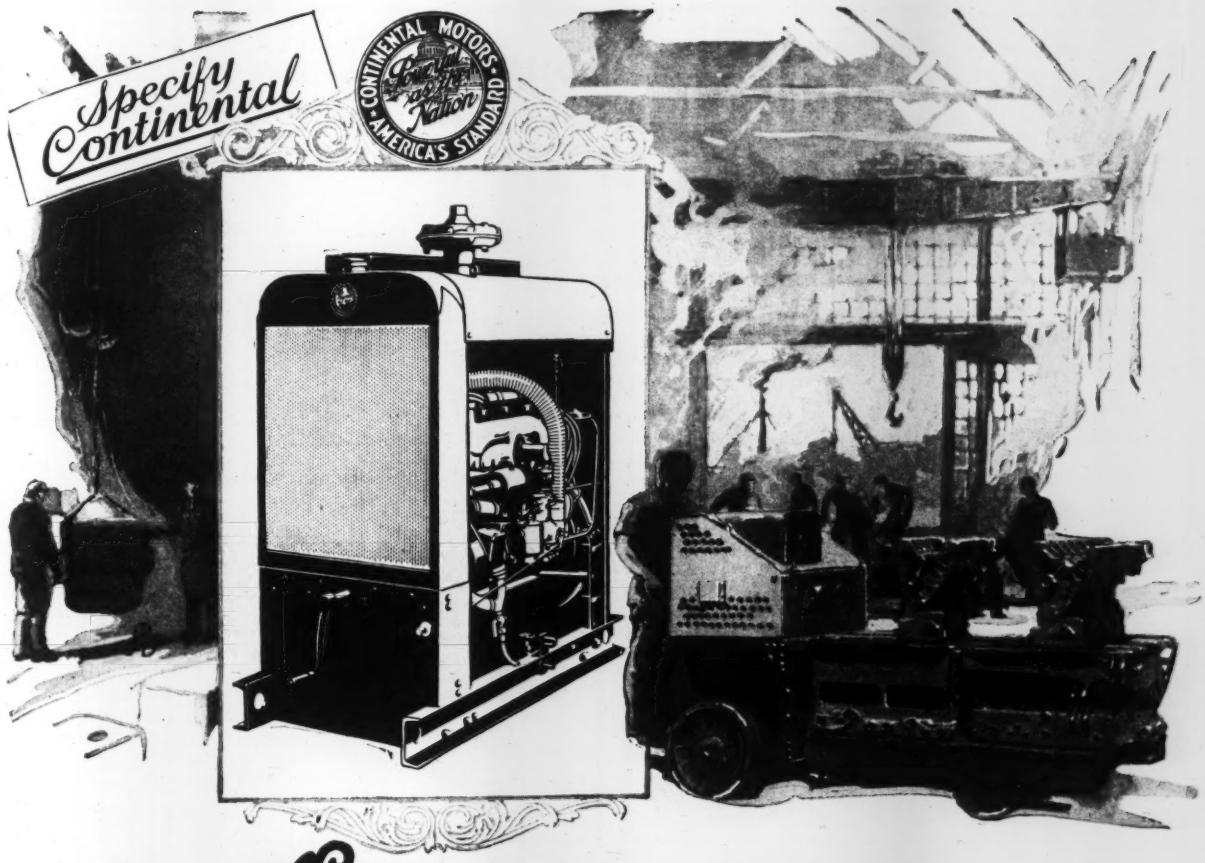

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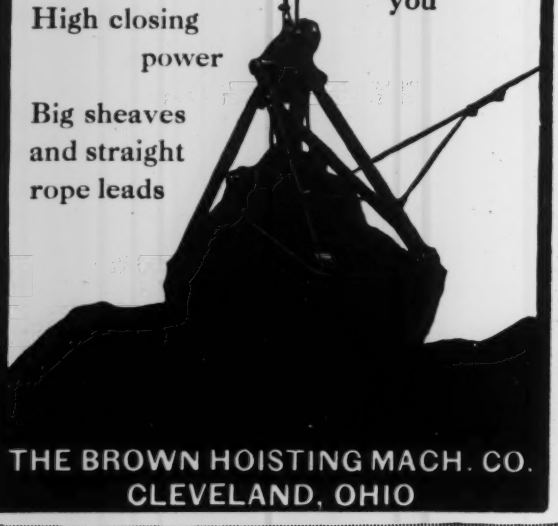

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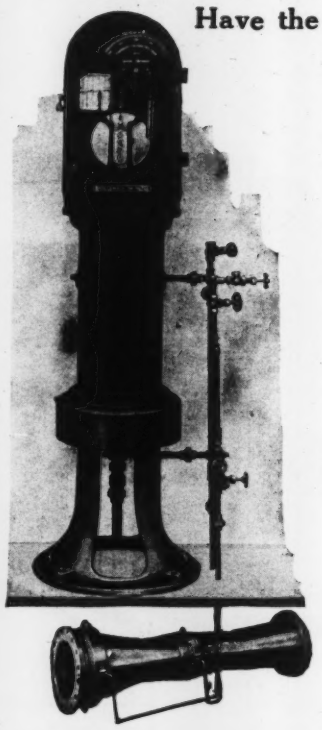

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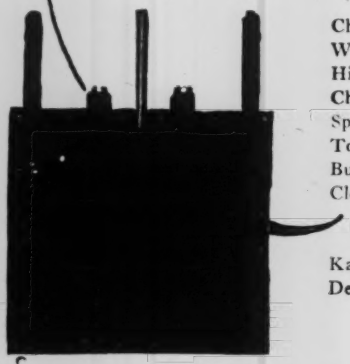

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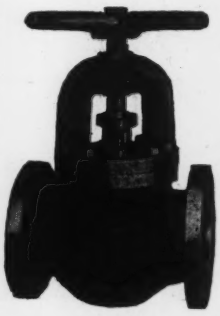

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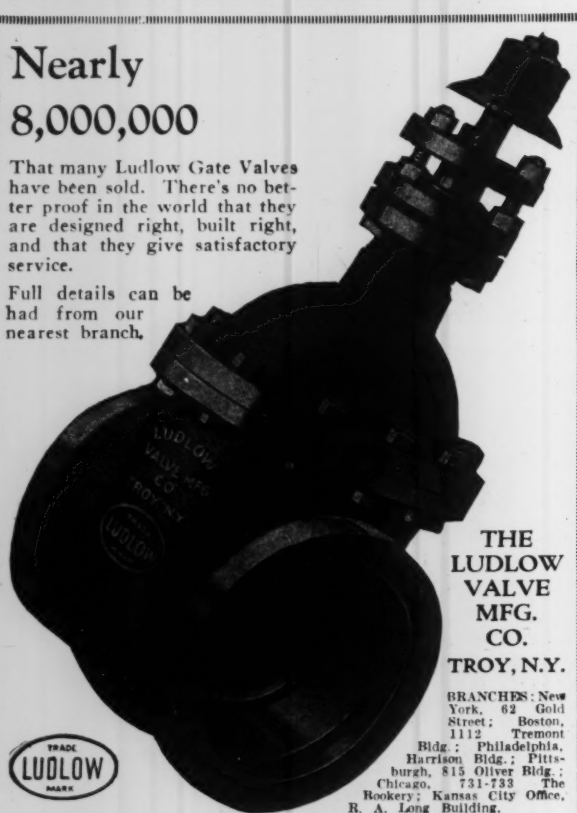

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for Jointing Water Mains

ONE PRICE—ONE QUALITY

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Clean Water Mains
Deliver Full Capacity
We are glad to confer with municipal officials or Water Companies.
National Methods are patented
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UNIVERSAL CAST IRON PIPE
THE CENTRAL FOUNDRY COMPANY
41 EAST 42d ST., NEW YORK
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no packing no calking no bell holes

GLAMORGAN PIPE & FOUNDRY CO.
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CAST IRON PIPE
For Water and Gas, Flange Pipe and Fittings
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Cast-Iron Water, Gas and Flange Pipe, Special Castings, Fire Hydrants, Valves, General Foundry and Machine Work.
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FOR WATER AND GAS
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With Specially Designed Fittings
For Corrosive Waters
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Sizes 1¼ in. through 8 in. Standard lengths. Catalog N. McWANE CAST IRON PIPE CO. Birmingham, Alabama *Precalked Fittings*

Save 25% to 50% by using Wyckoff Wood Pipe instead of Cast Iron Pipe
Cheaper. Lasts as long. Delivers more water. Get catalogue.
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WOODWARD WATERWHEEL GOVERNORS
Built in All Types and Sizes from the Smallest to the Largest
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Rockford, Illinois

ACIPCO MONO-CAST CENTRIFUGAL PIPE
BELL AND SPIGOT

Mono-cast pipe split endways to prove uniformity of section, freedom from inclusions, blow holes, etc.

What Is A Superior Pipe?

Mono-cast is a superior cast iron pipe for water and gas service because:

It is free of casting strains—

It has, in proper proportion to each other, ability to bend and ability to resist bending—

It is free of inclusions of foreign material, gas pockets and blow-holes—

It has more endurance against impact and shock—

It is uniform in wall thickness—

It is true to dimension, smooth outside and inside—

It has greater strength in the pipe wall—

It is sixteen feet long—

It is bell and spigot, with bead cast on.

Ability of Mono-cast to bend under stress is approximately 33% more than any other kind of centrifugal pipe.

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Mono-cast means made as a unit—an integral casting, every part of which is formed at the same moment by centrifugal force.

Mono-cast Specifications mailed on request. Write for a copy.

AMERICAN CAST IRON PIPE COMPANY
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ACIPCO MONO-CAST CENTRIFUGAL PIPE
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MONO-CAST MEANS MADE AS A UNIT—AN INTEGRAL CASTING, EVERY PART OF WHICH IS FORMED AT THE SAME MOMENT BY CENTRIFUGAL FORCE

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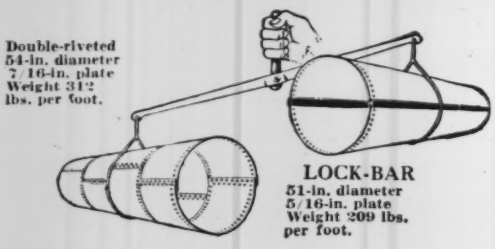
"Mono-cast" is the trade mark of the American Cast Iron Pipe Company.



LOCK-BAR STEEL PIPE

is generally given a preference of 3 in. less diameter than riveted steel pipe for a given capacity—and will carry approximately 30% greater working pressure than riveted steel pipe of similar plate thickness. Its coefficient of friction is the same as new cast iron pipe *and never grows less.*

Altogether, a fine investment. See our full page ads. every other issue for detailed discussions. Send business card for 200-page "Handbook of Pipe."

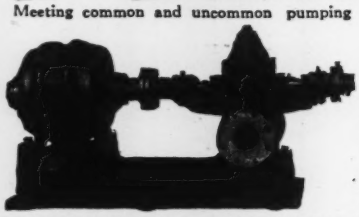
EAST JERSEY PIPE CO.
7 Dey Street, New York City

LOCK-BAR

Before Closing
STRONG AS THE PLATE ITSELF

MORRIS
CENTRIFUGAL PUMPS

Meeting common and uncommon pumping requirements has been our specialty for over three generations.



We furnish complete unit or pump only for steam, electric, belt, gear or rope drive. Reasonable price and performance guarantee justify you in insisting on a Morris quotation and giving it preference.

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Marion Shoes for Wood Pipe

This Mark on a Casting—

—means that it's made of Marion malleable iron, offering great resistance to shock, having high elastic limit, resisting oxidation, wears better, is free from slag holes, shrinkage cracks, etc., and is not subject to fatigue or crystallization.

Certified malleable castings for every purpose

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Complete pipe line installations for water supply, sewage disposal, etc.

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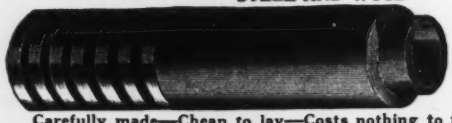

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THE MICHIGAN PIPE CO., BAY CITY, MICH.

One-Fifth The Weight of Cast Iron Pipe

One-Third The Weight of Wrought Pipe

An Absolutely Tight Durable Pipe

Fully 50% stronger than Straight Riveted Pipe of equal thickness. Light weight and simplicity of bolted connections results in low handling and installation expense. Suitable for Conveying Water, Air, Gas, Exhaust Steam and Wood Pulp.

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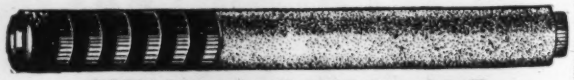
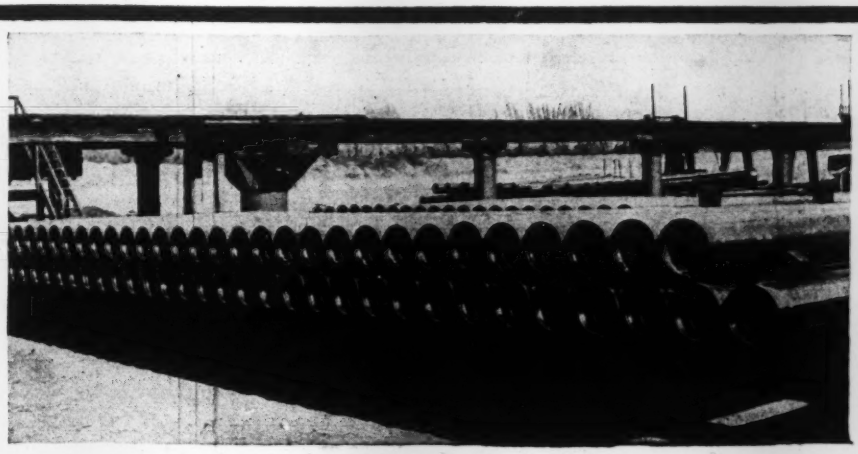
Pipe Specialists Continuously Since 1867



"STANDARD" WOOD PIPE
Will furnish Pipe to suit Conditions.
Standard Wood Pipe Company, Williamsport, Pa.



deLavaud Centrifugal Cast Iron Pipe

—is now ready to ship in sizes from 4″ to 20″

The principal features of deLavaud Centrifugal Pipe are:

1—Lower cost per foot.
2—Greater carrying capacity due to larger inside diameter. Its smooth surface produces less friction.
3—An even greater resistance to corrosion owing to its finer granular structure.
4—Cheaper to install owing to its uniform lead space and self centering bell.
5—It is easier to cut and tap.
6—Its greater strength and uniform section makes it valuable for use for higher pressures.
7—Adaptability to special joints due to its smooth exterior and uniform circumference.
8—It is made to be used with standard fittings and specials.
9—Annealing gives a uniform metal with no casting strains.
10—This method of casting leaves no possibility for sand holes or gas pockets.

Write for special literature covering manufacturing conditions and specifications of deLavaud Centrifugal Pipe.

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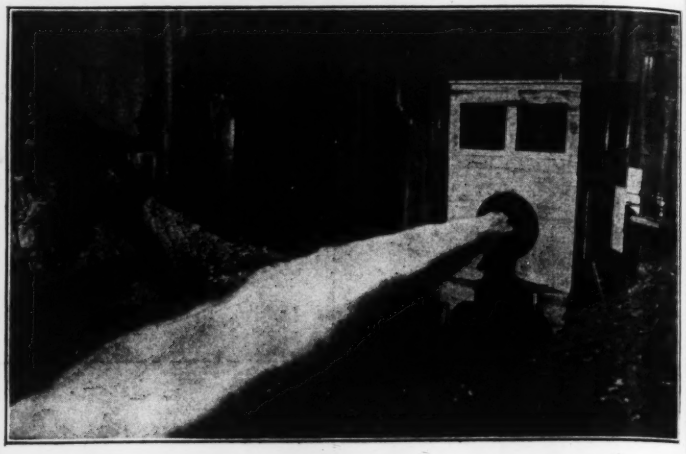
Cleveland: 1150 East 26th Street
New York: 71 Broadway
San Francisco: 3rd & Market Sts.
Pittsburgh: 6th & Smithfield Sts.
Dallas: Akard & Commerce Sts.
Kansas City: 13th & Locust Sts.
Minneapolis: 6th St. & Hennepin Ave

PELTON

Discharge Regulator at Cushman Dam

This 62 in. free discharge valve of the Larner-Johnson type was designed and manufactured in our San Francisco works for the City of Tacoma (Cushman Dam) project in 1925, its rated capacity being 1850 c.f.s. under 200 ft. static head. The illustration shows the valve partially opened, discharging approximately 900 c.f.s under 175 ft. head.

The regulator is provided with hand control, and is also equipped with a 90 in. Pelton butterfly valve to permit unwatering of the discharge valve. The butterfly valve is provided with electric motor operated control.



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Hydraulic Engineers
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Pacific Coast Representative: Larner Engineering Co., Philadelphia, Pa.; De La Vergne Machine Co., New York, N. Y.

PELTON

When delays are costly capacity counts!

Contractors appreciate the high capacity feature of Humphryes High Capacity Diaphragm Pumps for they know that the speedy elimination of water often prevents serious and costly delays.
When purchasing a diaphragm pump consider the capacity, construction, accessibility, and portability. Investigate the Humphryes-line.
Real power pump construction gives the illustrated trailer unit an unequaled capacity. Trailers are made in both three and four inch sizes.

Write for details.

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Distributors in principal cities

RoTURBo CENTRIFUGAL PUMPS

Manistee Iron Works Co., Manistee, Michigan

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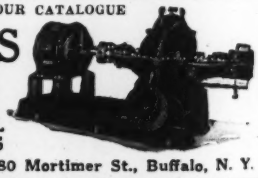
"Buffalo" PUMPS ALL KINDS



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De Laval

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Steam Turbines, for all speed and steam conditions; capacities up to 15,000 hp. Catalog D41. **Double Helical Speed Reducing Gears.** Catalog G41. **Centrifugal Pumps,** for all capacities. Catalog B41. **Centrifugal Blowers and Compressors.** Catalog F41. **Worm Reduction Gears.** Catalog R41. **Flexible Couplings.** Catalog K41.

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CENTRIFUGAL PUMPS

LECOURTENAY CO.
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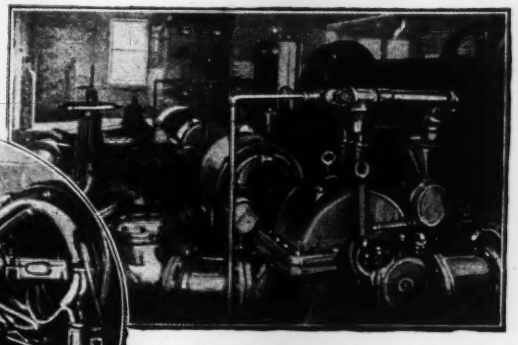
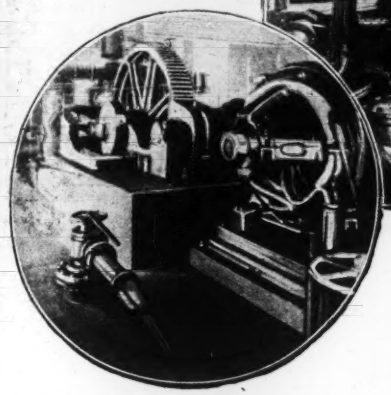
13 Years of
Efficient Service





Two GOULDS Centrifugal Pumps, recently installed by the City of Corning, New York. Each is rated at 2,676,000 gals. per 24 hrs.

GOULDS Horizontal Triplex Pump rated at 3,000,000 gals. per 24 hrs., which has given efficient service for 13 years to the City of Corning, New York.

The City of Corning, New York, had proof of the economical pump performance of GOULDS PUMPS right in their own water works plant. The unfailing, efficient service given for 13 years by a GOULDS Triplex Pump became the deciding factor in the selection of GOULDS PUMPS for the additional capacity required at this plant.

Goulds Pumps for Water Works

Waterworks pumping calls for absolute reliability, and continuous operation, with minimum attention over long periods of time.

GOULDS PUMPS have been on the market for 78 years. Their design, the result of long and varied experience, insures long life, high efficiency, and freedom from trouble and repairs. Only the best in materials and workmanship enters into their construction.

Every GOULDS PUMP is guaranteed to perform satisfactorily the specific work for which it is recommended.

GOULDS PUMPS

cover the entire field of modern pumping services

The list at the right hand side of this page is brief evidence of the versatility and wide application of the GOULDS line for all pumping services. There is a standard type of GOULDS PUMP for most conditions of head, capacity and drive.

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Insured by large stocks carried at our factory and branch warehouses.

The Goulds Engineering Staff

is ready to co-operate with consulting engineers, municipal engineering departments and contractors in the solution of pumping problems. There is no charge or obligation involved.

Write us for full particulars. We will respond promptly to your request.

The coupon will bring Bulletins and GOULDS DATA BOOKS on pumping as applied to a great variety of industries. Send the coupon.

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Seneca Falls, N. Y.
90 Branches and Representatives in Principal Cities

GOULDS PUMPS
Centrifugal, Triplex, Rotary, Vacuum, etc. for

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Building Equipment Services—including:
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Seneca Falls, N. Y.

Gentlemen:
I am interested in pumps for water-works, sewage plants, construction work, etc. Please send Bulletins and the Goulds Data Books.

Name.....

Company.....

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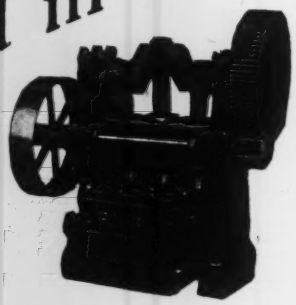
WORTHINGTON

"A friend in need"



IN times of emergency—when you simply cannot suffer a shut-down, you will find that a

WORTHINGTON TRIPLEX POWER PUMP

will stay on the job without a protesting murmur and see it through to successful completion.

Even if the water pumped be turbid or abrasive, you will find that it makes little difference to one of these sturdy pumps. Like all true friends a Worthington pump will render faithful service for years.

Worthington makes all types of pumps, steam and power driven, reciprocating and centrifugal.

The pump in the illustration is a single-acting Worthington triplex. It is suited for general contracting service, general water supply, mine pumping and the feeding of small boilers. Double openings are provided for both suction and discharge connections, permitting the use of pipe connections that are most convenient. Many other types are made:—simplex, duplex and triplex; single and double acting for all classes of service.

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HYDRAULIC TURBINES

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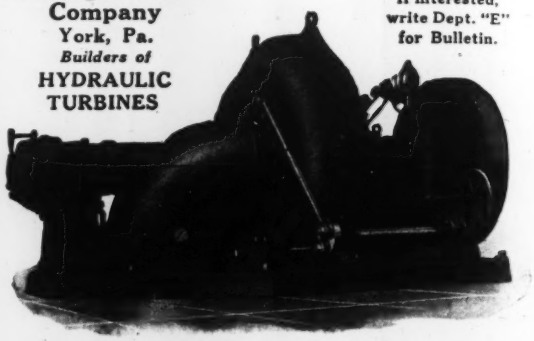

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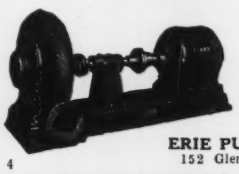

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General Steel Plate Construction
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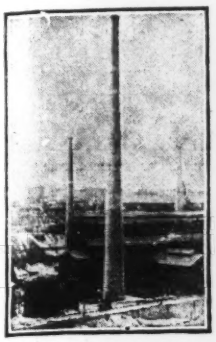

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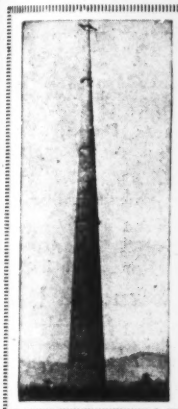

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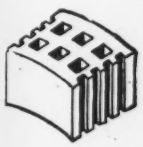

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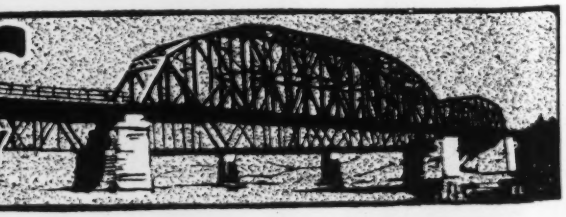

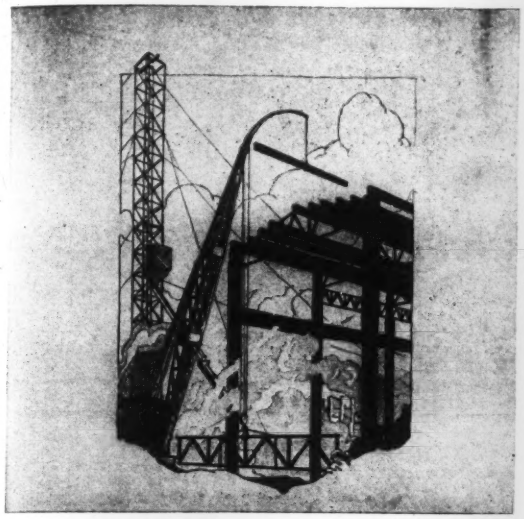

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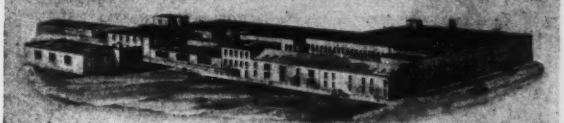

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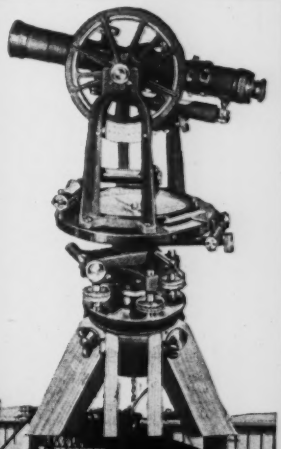

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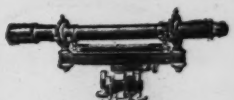

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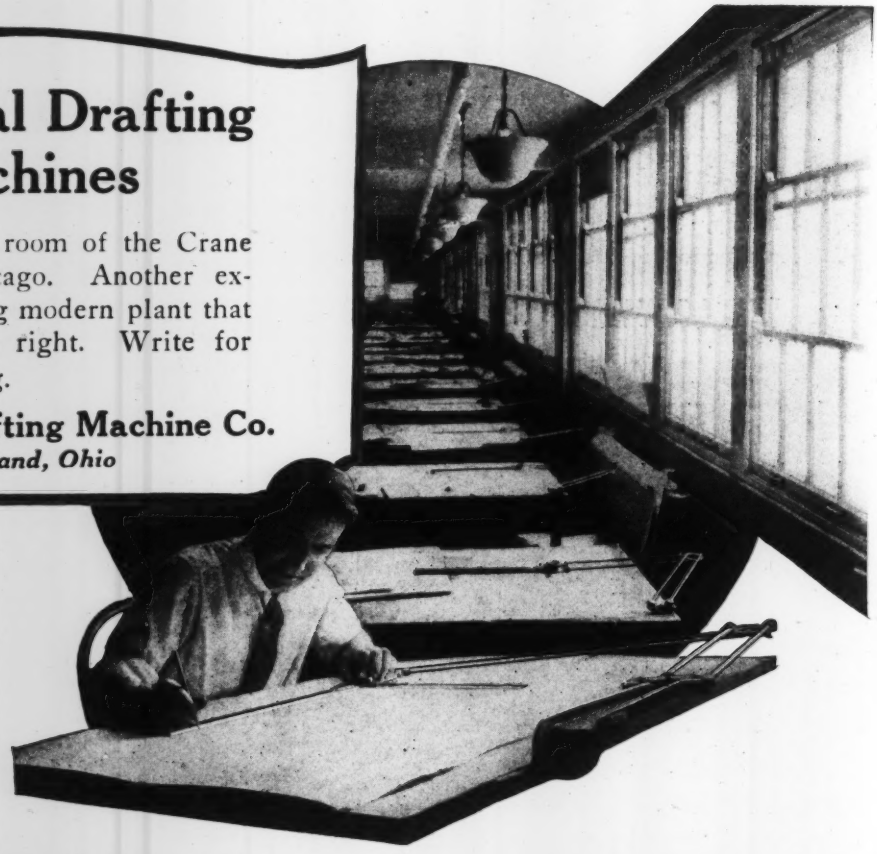

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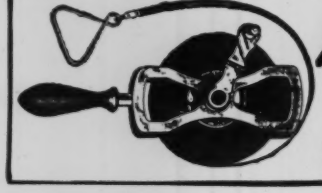

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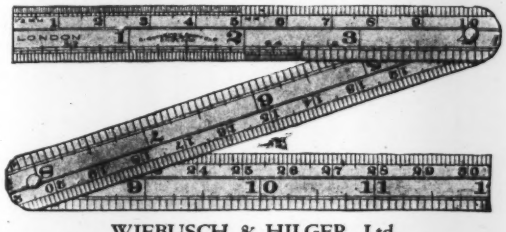

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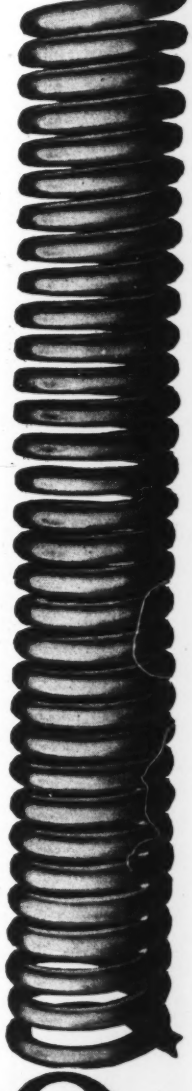

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OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: July 13.

Construction of Wells, Well Houses and Appurtenances

Sioux Falls, S. D.

Sealed bids will be received by the Board of Commissioners of the City of Sioux Falls, South Dakota, until 2 o'clock p.m. of July 13, 1926, for the construction of two wells, complete with well houses and appurtenances.

The work includes the construction and sinking of two wells, each of which will be 18 feet in outside diameter and from 42 to 45 feet deep, and the installation therein of the necessary pumping machinery and appurtenances. Each well has a strainer section of steel and reinforced concrete, carrying pocket filled with screened gravel; a water tight pump pit and a reinforced concrete shell, extending just above the ground surface and surmounted by a masonry well house: the said wells and work in connection therewith to be paid for in cash.

Instructions to bidders, forms of proposal, contract and forms of bond, and the plans and specifications may be inspected at the office of the City Auditor, at the Auditorium in the City of Sioux Falls, South Dakota, or at the office of the Consulting Engineers, Maury and Gordon, 1445 Monadnock Block, Chicago, Illinois.

A complete set of all of the above papers may be obtained from the Consulting Engineers upon application, accompanied by a check for $15.00, payable to the City Treasurer of the City of Sioux Falls, South Dakota, which amount will be refunded to the party depositing it upon the return in good order and condition of all the above named papers.

A certified check for $700 on some bank in the City of Sioux Falls, South Dakota, payable to the City Treasurer of the City of Sioux Falls, South Dakota, must accompany each bid, subject to the conditions expressed in the form of proposal. The City reserves the right to reject any and all bids.

WALTER C. LEYSE,
City Auditor.

MAURY & GORDON,
Consulting Engineers.

Bids: July 7.

Preliminary Borings

Albany, N. Y.

Sealed proposals for preliminary wash and core borings to determine the character of the underlying material on the shore and bottom of Lake Champlain at five crossings proposed for a bridge, will be received at the office of the State Engineer, Journal Building, Plaza, Albany, N. Y., until twelve o'clock noon (standard time) Wednesday July 7, 1926, when they will be publicly opened and read. Proposals shall be endorsed on the envelope "Proposal for Preliminary Borings for Proposed Bridge across Lake Champlain," addressed to the Lake Champlain Bridge Joint Legislative Committee, care of State Engineer, Journal Building, Albany, N. Y., and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in the State of New York and made payable at sight to the Lake Champlain Bridge Joint Legislative Committee or money equal to five (5) per cent of the amount of the proposal. The contractor to whom award is made will be required to furnish, for the faithful performance of the contract, a surety bond in the sum of fifty (50) per cent and an additional bond, known as the labor bond, in the sum of ten (10) per cent of the amount of the contract. The right is reserved to reject any and all bids. Specifications and estimates may be obtained and plans may be examined at the office of the State Engineer, Journal Building, Albany, N. Y., and at the office of Hon. Mortimer Y. Ferris, Chairman of the Lake Champlain Bridge Joint Legislative Committee, Ticonderoga, N. Y. Blueprints of plans, which consist of two sheets, will be furnished by the State Engineer upon payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

LAKE CHAMPLAIN BRIDGE JOINT
LEGISLATIVE COMMITTEE.
MORTIMER Y. FERRIS,
Chairman.

Dated June, 1926.

OFFICIAL PROPOSALS

Bids: July 21.

Substructure of Two Highway Bridges

THE PORT OF NEW YORK AUTHORITY
75 West Street,
New York City.

Sealed proposals for the Construction of the Substructures of two Bridges across the Arthur Kill, one between Perth Amboy, New Jersey, and Tottenville, New York, (named The Outerbridge Crossing), and the other between Elizabeth, New Jersey, and Howland Hook, New York, will be received at the office of the Chief Executive Officer of The Port of New York Authority until eleven o'clock, Daylight Saving Time, on the morning of Wednesday, July 21st, 1926, at which time and place the proposals will be publicly opened.

Information for Bidders, Proposal Blanks, forms of Contracts and Bonds, Plans and Specifications will be on file and may be seen on or after June 30, 1926, at the following places: Office of the Bridge Engineer, The Port of New York Authority, 75 West Street, New York, N. Y. Office of J. A. L. Waddell, Consulting Engineer, 150 Broadway, New York, N. Y.

Complete copies of the foregoing papers will be furnished to bidders by the Bridge Engineer or by the Consulting Engineer upon the deposit of Twenty-five Dollars ($25.00), per set for each bridge, which amount will be refunded upon their return in good condition within one week after the date of the execution of the contract.

The work to be done covers the construction of the foundations and piers of the main river bridge and approaches of the two crossings, ready for the erection of the superstructure.

In the case of each bridge, the contracts to be awarded are either one contract covering the entire substructure or two contracts covering respectively the eastern and western portions of the substructure. Bidders may tender on any or all of these contracts, and those tendering on several contracts will be permitted to refuse more than one.

The approximate quantities involved in the respective contracts are as follows:

Contract No. EH-1A, Elizabeth Substructure, Elizabeth-Howland Hook Bridge.

Concrete	30,000	cu.yds.
Reinforcing Steel	400	tons.

Contract No. EH-1B, Howland Hook Substructure, Elizabeth-Howland Hook Bridge.

Pneumatic Bases	5,000	cu.yds.
Concrete except in Pneumatic Bases	30,000	cu.yds.
Reinforcing Steel	600	tons.
Timber Piles	100,000	lin.ft.

Contract No. EH-1, Entire Substructure, Elizabeth-Howland Hook Bridge.

Pneumatic Bases	5,000	cu.yds.
Concrete except in Pneumatic Bases	60,000	cu.yds.
Reinforcing Steel	1,000	tons.
Timber Piles	100,000	lin.ft.

Contract No. PT-1A, Perth Amboy Substructure, Outerbridge Crossing.

Concrete	40,000	cu.yds.
Reinforcing Steel	850	tons.
Timber Piles	160,000	lin.ft.
Concrete Piles	20,000	lin.ft.

Contract No. PT-1B, Tottenville Substructure, Outerbridge Crossing.

Concrete	50,000	cu.yds.
Reinforcing Steel	850	tons.
Timber Piles	170,000	lin.ft.
Concrete Piles	10,000	lin.ft.

Contract No. PT-1, Entire Substructure, Outerbridge Crossing.

Concrete	90,000	cu.yds.
Reinforcing Steel	1,700	tons.
Timber Piles	330,000	lin.ft.
Concrete Piles	30,000	lin.ft.

Each bidder must submit with his proposal or proposals a certified check made payable to the order of the Treasurer of The Port of New York Authority in the amount of Thirty-five Thousand Dollars ($35,000.00), for each bridge in relation to which he submits any bid.

The successful bidder on any Contract will be required to execute and deliver to the Port Authority, within ten (10) days after the awarding of the Contract, a surety bond in a prescribed form, duly executed by a surety company approved by the Port Authority and authorized to do business within the States of New York and New Jersey, the said bond to be in a sum equal to the total of the prices for all

OFFICIAL PROPOSALS

items, shown in his proposal. There must be annexed to each proposal the consent of the proposed surety to execute a bond in the form and in the amount prescribed, together with an undertaking to indemnify the Port Authority against any loss by reason of the failure of the bidder to execute the contract or furnish the surety company bond. The form of the consent and undertaking are annexed to the form of the contractor's proposal.

The Port Authority reserves the right in its absolute and unqualified discretion to reject any and all bids, to determine who is the lowest responsible bidder and to accept that bid which in its absolute and unqualified judgment will under all the circumstances best serve the public interest.

Within fourteen (14) days after the opening of the Proposals, the Port Authority will award the Contract or Contracts, delivering to the successful bidder or bidders in person or by mail a written notice of acceptance, or will reject all bids.

New York, June 24, 1926.
The Port of New York Authority.
J. E RAMSEY,
Chief Executive Officer.

Bids: June 29.

Bridge

DEPARTMENT OF PUBLIC WORKS
STATE OF MARYLAND
STATE ROADS COMMISSION
Baltimore, Md.

Sealed proposals for building one bridge as follows:

Frederick County, Cont. F-84. One single 60' 0" span reinforced concrete arch bridge with a 24' 0" clear Roadway over Ballenger Creek about 3 miles south of Frederick on the Buckeystown Pike, together with necessary fill, etc.

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 29th day of June, 1926, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 12th day of June, 1926.

JOHN N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

Bids: July 16.

Bridge

Huntington, W. Va.

BIDS DESIRED, Huntington, W. Va., July 16, at 10 a.m. at the office of the Board of Commissioners.

Separate proposals will be received on concrete sub-structure and steel superstructure consisting of one 200-foot span, two 100-foot spans and two 29½ foot spans, with a 27-foot roadway and two 6-foot walks for bridge over the Guyandotte river at Fifth Avenue.

A certified check for 10% of the amount bid made payable to the city Treasurer City of Huntington shall be filed with each bid.

Contractors please send check payable to City Treasurer for $1.50 for cost of Blue Prints and Proposal Blanks.

A. B. MAUPIN,
City Engineer.

Road Builders

Norfolk, Va.

Want complete town built at Norfolk, Va., 5 miles streets, and etc. Don't answer unless can assist handling our bonds. A boom starting here, millions northern capital being spent by P. R.R. and others. Pennsytown Corporation.

By W. B. SHAFER, JR.

OFFICIAL PROPOSALS

Bids: July 11.

Sewer System

Grover (Tiltonville), Ohio.

Sealed bids will be received by the Village of Grover (Tiltonville), Ohio, at the office of the Clerk of said Village, until twelve o'clock (Central Standard Time), noon, of Monday, July 11, 1926, for the furnishing of the necessary labor and materials for the construction of a general plan of sewerage in the First or South Sewer District and the Second or North Sewer District, all in accordance with the plans, specifications, estimates and profiles relating thereto, heretofore approved and now on file in the office of the Clerk of said Village, bids will be received for each of the above Districts separately. Such bids must conform to requirements of "Instructions to Bidders," contained in said specifications and must contain the full name and address of every person or company interested in the same, and be accompanied by a bond with sufficient surety in the sum of five (5%) per cent of the amount bid, to the full satisfaction of the Council of said Village or a certified check on some solvent bank for said amount as a guaranty that if said bid is accepted, the contract will be entered into and its performance properly secured.

Should any bid be rejected such check will be forthwith returned to the bidder, if bid is accepted, check will be returned upon the proper execution and securing of the contract and bond. Bids must be submitted on blanks which will be furnished on application and contain information therein indicated to be given.

Plans and specifications may be inspected and proposal forms secured at the office of the Village Clerk or a complete set of each will be furnished by the Engineer upon payment of $10.00.

The right is reserved to reject any and all bids.

By order of the Council of the Village of Grover, Ohio.

BERTHA HARRIS,
Village Clerk.

HOMER C. ALTHAR, Engineer,
1st Natl. Bank Bldg.,
Bellaire, Ohio.

Bids: July 11.

Water Supply System

Grover (Tiltonville), Ohio.

Sealed bids will be received by the Village of Grover (Tiltonville), Ohio, at the office of the Clerk of said Village, until twelve o'clock (Central Standard Time), noon, of July 11, 1926, for the furnishing of the necessary labor and materials for the construction of a water supply and distribution system, all in accordance with the plans, specifications, estimates and profiles relating thereto, heretofore approved and now on file in the office of the Clerk of said Village. Such bids must conform to requirements of "Instructions to Bidders" contained in said specifications and must contain the full name and address of every person or company interested in the same, and be accompanied by a bond with sufficient surety in the sum of five (5%) per cent of the amount bid, to the full satisfaction of the Council of said Village, or a certified check on some solvent bank for said amount as a guaranty that if said bid is accepted, the contract will be entered into and its performance properly secured.

Should any bid be rejected such check will be forthwith returned to the bidder, if bid is accepted, check will be returned upon the proper execution and securing of the contract and bond. Bids must be submitted on blanks which will be furnished on application and contain information therein indicated to be given.

Plans and specifications may be inspected and proposal forms secured at the office of the Village Clerk or a complete set of each will be furnished by the Engineer upon payment of $10.00.

The right is reserved to reject any and all bids.

By order of the Council of the Village of Grover, Ohio.

BERTHA HARRIS,
Village Clerk.

HOMER C. ALTHAR, Engineer,
1st Natl. Bank Bldg.,
Bellaire, Ohio.

Bids: June 29.

Bridges and Paving

WESTCHESTER COUNTY PARK COMMISSION
CONTRACTS NO. 83 AND NO. 97

Bronxville, N. Y.

Sealed bids covering Contracts No. 83 and No. 97 will be received at the Office of the Westchester County Park Commission, 72 West Pondfield Road, Bronxville, N. Y., until 11:30 and 11:40 a.m. respectively, Daylight Saving Time, on June 29, 1926, when the bids received will be publicly opened and read.

CONTRACT NO. 83

Provides for the construction of seven (7) stone-faced reinforced concrete river bridges in the Hutchinson River Parkway, in Mount Vernon, Pelham and North Pelham, N. Y.

The principal items are:

Rock Excavation	15 cu.yds.
Earth Excavation	5,750 cu.yds.
Fill	7,400 cu.yds.
Concrete (Class A and B)	1,630 cu.yds.
Masonry	415 cu.yds.
Reinforcing Steel	61,000 lbs.
Wooden Piles	1,900 lin.ft.
Timber Facing	5,400 F.B.M.

CONTRACT NO. 97

Provides for the fine grading and paving 3,000 feet of the Rumsey Road section of the Sawmill River Parkway from Yonkers Avenue to Spruce Street, Yonkers, N. Y.

The principal items are:

Grading	14,000 sq.yds.
Concrete (Foundation)	2,700 cu.yds.
Pavement (Asphalt Blocks or Bituminous Concrete)	13,500 sq.yds.

Pamphlets containing information for bidders, form of proposal, specifications and contract drawings, may be obtained by intending bidders at the above address by depositing $5.00, for either set.

The right is reserved to reject any or all bids.

Westchester County Park Commission.
By JAY DOWNER,
Chief Engineer.

Dated: June 7, 1926.

Bids: July 13.

300,000-Gallon Elevated Steel Tank

Sioux Falls, S. D.

Sealed bids will be received by the Board of Commissioners of the City of Sioux Falls, S. D., until 2 o'clock p.m. of July 13, 1926, for the fabrication and erection of a 300,000-gallon elevated steel tank in the City of Sioux Falls.

Instructions to bidders, forms of proposal, contract and forms of bond, and the plans and specifications may be inspected at the office of the City Auditor, at the Auditorium in the City of Sioux Falls, South Dakota, or at the office of the Consulting Engineers, Maury and Gordon, 1445 Monadnock Block, Chicago, Illinois.

A complete set of all of the above papers may be obtained from the Consulting Engineers upon application, accompanied by a check for $15.00, payable to the City Treasurer of the City of Sioux Falls, South Dakota, which amount will be refunded to the party depositing it upon the return in good order and condition of all the above named papers.

A certified check for $1,000 on some bank in the City of Sioux Falls, South Dakota, payable to the City Treasurer of the City of Sioux Falls, South Dakota, must accompany each bid, subject to the conditions expressed in the form of proposal. The City reserve the right to reject any and all bids.

WALTER C. LEYSE,
City Auditor.

MAURY & GORDON,
Consulting Engineers.

Bids: June 28.

Waterworks Improvements

Willimantic, Conn.

Bids will be received until 7 p.m. (Eastern Standard Time), June 28th, 1926, on three contracts: Contract No. 1, a new water pumping unit; Contract No. 2, new water main; Contract No. 3, a ten-ton traveling crane, for improvements to the waterworks system of the city of Willimantic, Conn.

Plans, specifications and official notice can be seen at the office of the City Clerk or at the office of Henry W. Taylor, Consulting Engineer, 149 Broadway, New York City.

Bids: June 30.

Steel Dredge Hull

STATE OF NEW YORK
DEPARTMENT OF PUBLIC WORKS
BUREAU OF CANALS

Albany, N. Y.
June 15, 1926.

Sealed proposals will be received by the undersigned at his office in the State Public Works Building, 353 Broadway, Albany, N. Y., until 1:00 p.m. eastern standard time, which is 2:00 p.m. daylight saving time, of Wednesday, June 30th, 1926, at which place and hour they will be publicly opened and read:

For the construction and delivery at Barge canal terminal, Syracuse, N. Y., of a steel dredge hull, pursuant to the provisions of Chapter 225, Laws of 1923, and Chapter 181, Laws of 1925. Estimated cost, $22,000,000.

Sheets Detail 1 and 2.

Plans may be seen and blank forms for proposal, specifications, contracts and bonds may be obtained at the office of the Bureau of Canals, Albany, N. Y.

Every proposal for said work must be accompanied by a money deposit for five per cent of the amount of the proposal. The amount of bond for faithful performance on execution of the contract will be fifty per centum of the proposal.

Each proposal must be addressed to the Bureau of Canals, State Department of Public Works, Albany, N. Y., and must be endorsed on the envelope, "Steel dredge hull."

The right is reserved to reject any or all bids.

THOMAS F. FARRELL,
Commissioner of Canals and Waterways.

Bids: June 29.

Contract No. 40, Ontelaunee Dam

Reading, Pa.

Sealed proposals will be received by the Council of the City of Reading, Pennsylvania, until 10 a.m. Eastern Standard time, Wednesday, June 30, 1926, for the construction of a concrete impounding dam on Maiden Creek, Berks County.

Plans, specifications and bidding blanks can be had on and after June 7th, at the office of the Chief Engineer, Bureau of Water, Room 209, City Hall, Reading, Pa., upon deposit of 25 dollars, which deposit will be returned to the successful bidders and to others upon return of plans and specifications in good condition not later than 30 days after the opening of the bids.

Bidders must accompany their bids by cash, or certified check for an amount equal to 10 per cent of the total amount of the bid.

A satisfactory bond will be required for the faithful performance of the contract, for an amount equal to one-half of the total amount bid.

In all the work herein embraced, preference shall, at all times, be given to local laborers and mechanics and the contractor must comply with the Workmen's Compensation Insurance Act.

Proposals must be placed in a plain outer envelope and enclosed in inner sealed envelopes with Proposal for Impounding Dam marked thereon, and addressed or delivered to City Council, in care of City Clerk, City Hall, Reading, Pa.

Council reserves the right to reject any or all bids, and to accept any bid which, in its judgment, is for the best interests of the city.

A. R. O'REILLY,
Chief Engineer, Bureau of Water.
FRED G. HODGES, Superintendent,
Dept. of Parks and Public Property.

Bids: July 7.

Highway Work

Harrisburg, Pa.

Pennsylvania Department of Highways, Harrisburg, Pennsylvania. Bids will be received July 7, 1926, for construction of fourteen projects, totaling approximately forty-two miles. Construction to be reinforced concrete and water bound macadam surface course. Projects situated in the following counties:

Adams, Allegheny, Beaver, Blair, Franklin, Greene, Carbon, Lawrence, Lebanon, Schuylkill, Warren-Forest, Warren, Washington, Westmoreland.

Full particulars upon application to W. H. Connell, Engineering Executive and Acting Secretary of Highways, Harrisburg, Pennsylvania.

OFFICIAL PROPOSALS

Bids: July 15.

Bridge

Baton Rouge, La.

Sealed proposals will be received at the office of the Louisiana Highway Commission, Reymond Building, Baton Rouge, Louisiana, up to 11 o'clock a.m., THURSDAY, JULY 15th, 1926, at which place and time they will be publicly opened for the construction of the Tensas River Bridge, Federal Aid Project No. 161-C, on the Sicily Island-Clayton Highway, in the Parishes of Catahoula and Concordia. Location of the proposed bridge is approximately 500 feet north east of the Missouri Pacific Railroad Bridge at Clayton, Louisiana.

The construction consists of furnishing all material and building one 160' steel swing span, two 140' steel fixed truss spans and two 30' concrete deck girder approach spans; all on concrete piers and abutments with pile footings. The approximate quantities involved are:

990	Cubic Yards of Structural Excavation.
1,135	Cubic Yards Class "A" Concrete (in piers and abutments).
81,165	Pounds reinforcing steel.
192,660	Feet Board Measure creosoted lumber.
13,250	Lineal feet creosoted piling (in fenders).
1,400	Lineal feet creosoted foundation piling.
4,470	Lineal feet untreated foundation piling.
700	Lineal feet reinforced concrete foundation piling.
14	Test piles.
438,700	Pounds of fabricated structural steel (in trusses).
48,000	Pounds machinery and steel castings (in draw span).
1	Power plant (in draw span.)
190	Cubic Yards class "E" concrete (in floor slabs).
304	Square Yards Rock Asphalt Wearing Surface.

Information as to the location, character of work, extent and class of material, terms of payment, regulations governing the manner of submitting proposals and executing contract may, upon applicaion, be obtained at the office of the Louisiana Highway Commission, Reymond Building, Baton Rouge, Louisiana. Plans and specifications may be inspected at the office of the Commission in Baton Rouge, or will be furnished upon receipt of $5.00 as payment therefor, not to be refunded.

W. E. ATKINSON,
Chairman Louisiana Highway Commission.

W. B. ROBERT,
State Highway Engineer.

Bids: June 30.

Road Work

STATE DEPARTMENT OF PUBLIC WORKS BUREAU OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at the office, 353 Broadway, Albany, N. Y., at one o'clock p.m., advanced standard time, which is twelve o'clock noon, eastern standard time, on Wednesday, June 30, 1926, for the construction of highways in the following counties:

Orange .....(two highways: 3.91 & 5.10)
Saratoga .....(one highway: 2.98)
Schenectady .....(one highway: 1.40)
Steuben .....(one highway: 3.91)

ALSO FOR THE RECONSTRUCTION OF THE FOLLOWING:

Columbia .....(one contract: 3.89)
Orange .....(one contract: 37.9)
Oswego .....(one contract: 2.54)
Ulster .....(one contract: 4.85)
Westchester...(two contracts: 2.52 & 1.93)

Maps, plans specifications and estimates may be seen and proposal forms obtained at the office of the Bureau in Albany, N. Y., and also at the offices of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

A. W. BRANDT,
Commissioner of Highways.

OFFICIAL PROPOSALS

Bids: June 30.

Echo Lake Dam and Appurtenances

OFFICE OF THE DEPARTMENT OF PUBLIC AFFAIRS OF THE CITY OF NEWARK, N. J.
City Hall, Newark, N. J.
June 17, 1926.

Sealed proposals will be received from 9 to 9:15 a.m., Eastern standard time (10 to 10:15 a.m. Daylight saving time), on Wednesday, June 30, 1926, at the office of the Director of the Department of Public Affairs, City Hall, and then publicly opened and read, for the performing of all necessary work required in the carrying out of the contract for the construction of Echo Lake Dam and appurtenances. The work will include the building of two earth dams, a concrete overflow weir, reinforced concrete intake tower, conduit and culverts, the excavation of about 3,670 feet of outlet channel having a maximum depth of 23 feet and the construction and removal of two coffer-dams. The principal quantities involved include 66,000 cubic yards earth excavation, 8,000 cubic yards rock excavation, 1,600 cubic yards concrete masonry and 22,000 cubic yards earth embankment.

Drawings and a pamphlet containing the information for bidders, terms of bidding, form for proposal, form of contract, and specifications may be examined at the office of the Chief Engineer, Room 205, City Hall, and may be obtained at said office upon deposit of $10.00, which deposit will be repaid upon the return of the pamphlet and drawings. All bids shall be made on the blank form supplied by the Department of Public Affairs, which provides for a detailed statement as to the bidder's experience and resources.

Proposals must be accompanied by the consent in writing of a surety company, qualified to do business in New Jersey, binding itself that, if the contract be awarded to the person making the proposal, the said surety company will become surety for the faithful performance of the said contract, in an amount equal to 100 per cent of the contract price.

All bids must be accompanied by a certified check for ten thousand dollars ($10,000) as a guarantee for the good faith of the bidder. Checks of unsuccessful bidders will be returned within 15 days, that of the successful bidder upon the execution of the contract and bond. The contract will be awarded to the lowest responsible bidder.

The City reserves the right to reject all proposals, or any proposal which may be informal, or the acceptance of which would be, for any other reason, detrimental to the interests of the City, and to waive informalities.

By direction of the Board of Commissioners of the City of Newark.

THOMAS L. RAYMOND, Mayor.
Director, Dept. of Public Affairs.

Bids: July 6.

Curbing and Paving

Forty-Fort Borough,
Kingston, Pa.

Sealed proposals will be received by the Forty-Fort Borough Council at the Borough Building on Tuesday evening, July 6th, at 8 o'clock, for 14,924 feet of straight curb, 390 feet of circular curb, 39,092 square yards of paving, covering eleven streets.

Alternate bids will be accepted on Amiesite, Sheet Asphalt, Kyrock and Kentucky Rock Asphalt on concrete base, and Reinforced Concrete.

Plans, specifications and bidding sheets can be procured at the office of Smith and Welles, Borough Engineers, 1003-6 Coal Exchange Building, Wilkes-Barre, Pennsylvania, upon the deposit of $25.00, which amount will be refunded if plans and specifications are returned before the letting.

Each proposal must be accompanied by a certified check for 10% of the amount of the bid, on a Luzerne County Bank, payable to A. J. Sordoni, Borough Treasurer, or a bidding bond covering 10% of the bid, acceptable to the Borough Attorney.

The Council reserves the right to reject any or all bids.

C. W. EVANS,
Borough Secretary.

OFFICIAL PROPOSALS

Bids: July 9.

Highway Bridge

STATE OF NEW YORK
DEPARTMENT OF PUBLIC WORKS
BUREAU OF CANALS

Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the State Public Works building, 353 Broadway, Albany, N. Y., until 1:00 p.m. eastern standard time, which is 2.00 p.m. daylight saving time, of Friday, July 9th, 1926, at which place and hour they will be publicly opened and read, as follows:

For constructing a highway bridge floor on Movable Dam No. 8 in the Mohawk river at Tribes Hill, and for constructing approach spans, abutments and approaches therefor.

Sheets 1 to 8 inclusive.

Plans may be seen, and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Bureau of Canals, Albany, N. Y., at the office of the Division Engineer, Department of Public Works, at Utica, Syracuse, Rochester and Buffalo; and at the Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the State Public Works Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit, within the State and payable at sight to the Commissioner of Canals and Waterways for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Commissioner of Canals and Waterways.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Commissioner of Canals and Waterways which sum shall not be less than fifty per centum (50 per cent) of the estimated cost of the work according to the contract price, and an additional bond known as the labor bond in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work, according to the contract price will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Bureau of Canals, State Department of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidded will be required to satisfy the Commissioner of Canals and Waterways of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject any or all proposals and readvertise and award the contract in the regular manner, if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

THOMAS F. FARRELL,
Commissioner of Canals and Waterways.

OFFICIAL PROPOSALS

Bids: July 22.

West Brook Viaduct, Wanaque Reservoir

24 Commerce St., Newark, N. J.
June 25, 1926.

Sealed proposals will be received from 11:00 a.m., to 11:15 a.m., Daylight Saving Time, on July 22, 1926, by the North Jersey District Water Supply Commission in its office, Room 1125, 24 Commerce St., Newark, N. J., and publicly opened and read at the last named hour, for the performing of all necessary work required in the construction of West Brook Viaduct.

The work will include the construction of a seven-span concrete viaduct about 20 feet wide and 525 feet long, with a maximum pier height of 80 feet, together with about 600 feet of earth fill approaches and necessary appurtenances. The principal quantities involved include about 400 cubic yards of excavation in sheeted trench, 3,000 cubic yards of excavation not in sheeted trench, 34,000 cubic yards of embankment and 3,500 cubic yards of concrete masonry.

A pamphlet containing the information for bidders, form for proposal, form of contract, specifications and drawings may be examined at the office of the Commission and may be obtained at said office upon deposit of $10.00, which deposit will be repaid upon the return of the pamphlet within 30 days.

All bids shall be made on the blank form supplied by the Commission, which provides for a detailed statement as to the bidder's experience and resources as well as the unit prices for which he will execute the respective items of work.

Each proposal must be accompanied by an agreement in writing of a surety company qualified to do business in New Jersey, binding itself to indemnify the Commission against any losses due to the failure of the person or persons making said proposal to properly execute the contract in case it be awarded to him or them, and binding itself that if the contract be so awarded the said surety company will become surety for the faithful performance of the same in an amount equal to 50 per cent of the contract price.

All bids must be accompanied by a certified check for ten thousand dollars ($10,000), as a guarantee for the good faith of the bidder. Checks of unsuccessful bidders will be returned within 15 days, that of the successful bidder upon the execution of contract and bond.

The Commission reserves the right to reject all proposals, or any proposal which may be informal or the acceptance of which, in the judgment of the Commission for the reasons as suggested in information for bidders or for any other reason, would be detrimental to the interests of the municipalities for which the work is to be done.

By order of the North Jersey District Water Supply Commission of the state of New Jersey.

BERKELEY W. MOORE, JR.,
Chairman.

Attest: EDMOND TYLER, Secretary.
ARTHUR H. PRATT,
Chief Engineer.
MORRIS R. SHERRERD,
Consulting Engineer.

Bids: June 29.

Furnishing Cast Iron Pipe and Fittings

Wheeling, W. Va.,
June 16, 1926.

Sealed proposals for furnishing cast iron pipe and fittings will be received by the City of Wheeling, W. Va., until 12 o'clock noon, Eastern Standard Time on the 29th day of June, 1926, and will then be publicly opened and read.

Official Proposal Blanks, Instructions to Bidders, Specifications, Form of Contract and Bond may be seen at the office of the City Clerk, Wheeling, W. Va., or one (1) copy of each may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Pittsburgh, Pa., or to the City of Wheeling, W. Va., on deposit of Twenty-five Dollars ($25.00) which amount will be refunded to bidders on receipt of a bona fide bid, or upon the return, within 30 days after receipt of bids, specifications in good order.

The right is reserved to reject any or all bids.

H. L. KIRK,
City Manager.

Attest: HOWARD C. LANE,
City Clerk.

OFFICIAL PROPOSALS

Bids: July 12.

Bridge Reconstruction

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for:

Reconstruction of the bridge over Pensauken Creek at M. P. 3.6 on Route No. 2, in the counties of Burlington and Camden, the new structure to have a clear span of 64 feet and a clear roadway of 40 feet with two side walks. The superstructure consists of half-through plate girders with transverse plate girder floor beams, all encased in concrete and supporting a reinforced concrete slab. The substructure consists of four concrete piers and wing walls founded on timber piling. The principal items of construction are 400 cu.yds. foundation excavation; 11,000 lin.ft. piling; 1,470 cu.yds. concrete; 230,000 lbs. structural steel; 16,000 lbs. reinforcing rods; 6,600 cu.yds. borrow; 1,427 sq.yds. concrete paving.

Bids for the above will be received at the office of the State Highway Commission, 9th floor Broad Street Bank Building, Trenton, New Jersey, on Monday, July 12th, 1926, at eleven o'clock (11:00 a.m.) Standard Time, and will be opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) upon application to the State Highway Department, Room 901, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated in the 1926 bridge specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and name of the bridge on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Secretary.

Bids: July 12.

Garbage Incinerators, Chimney, Buildings and Ramp

Ambridge, Pa.,
June 18th, 1926.

Sealed proposals for the construction of Garbage Incinerators, Chimney, Building and Ramp will be received at the office of the Borough Manager of the Borough of Ambridge, Pennsylvania until 4:00 p.m., July 12th 1926 (Eastern Standard Time).

The plant is to consist of two units, each having a capacity of ten (10) tons of garbage and rubbish per eight hours. Bidder is to submit plans, specifications and guarantees of the incinerators, etc., which he proposes to install, and which must be in accordance with general specifications prepared by the Borough of Ambridge.

A copy of the specification, and a plan of the proposed site may be obtained at the office of the Borough Manager.

Each bid must be accompanied by a certified check, made payable to the Treasurer of the Borough of Ambridge in the amount of Five Hundred ($500.00) Dollars.

The Borough of Ambridge reserves the right to reject any or all bids.

Borough of Ambridge.
By A. W. JOHNS,
Borough Manager.

OFFICIAL PROPOSALS

Bids: July 12.

State Road Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

ROUTE NO. 8, SECTION NO. 8

Construction of Route No. 8, Section No. 8, Sussex-Hamburg, in the County of Sussex. Estimated 27,856 cu.yds. earth excavation; 8,997 cu.yds. hard rock excavation; 54,586 sq.yds. double line reinforced concrete pavement; 2 small span bridges.

Bids for the above will be received at the office of the State Highway Commission, 9th floor Broad Street Bank Building, Trenton, New Jersey, on Monday, July 12th, 1926, at eleven o'clock (11:00 a.m.) Standard Time, and will be opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10) upon application to the State Highway Department, Room 901, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated in the 1926 standard specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in special addressed envelopes will be considered informal and will not be opneed.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Secretary.

Bids: July 19.

Water Works Construction Including Wells

Charleston, Mo.

Sealed proposals addressed to the "Honorable Mayor and City Clerk, Charleston, Missouri," indorsed "Proposal for Water Works Construction" will be received until 8 p.m., July 19, 1926, at which time they will be publicly opened and read.

A cashier's check upon a local Charleston, Mo., bank for $3,000, made payable to the City of Charleston, Mo., to accompany each bid. A $1,000 check for wells only, $2,000 for the balance.

The work consists of drilling two wells 18" x 12" x 400', equipped with motor driven pumps, 1 booster pump, 100,000 gallon elevated tank, and combination pump and fire truck building.

Payments, 85% monthly estimates in cash.

The City reserves the right to reject any or all bids and to accept any.

Plans and specifications may be seen at the office of the City Clerk and the City Engineer and may be obtained from the Consulting Engineer upon a deposit of $12. Specifications only, $6 deposit. Any one plan, $4 deposit. 75% of all deposits will be refunded upon the return of the plans and specifications to the Consulting Engineer's office not later than July 29, 1926.

C. L. JOSLYN.
Mayor.
E. H. SMITH,
City Clerk.
L. T. BERTHE,
City Engr.

FRANK L. WILCOX,
Consulting Engineer,
Chemical Building,
St. Louis, Mo.

OFFICIAL PROPOSALS

Bids: June 29.

Street Improvement

West Palm Beach, Fla.

Sealed bids will be received by the City Commission of the City of West Palm Beach, Florida, up to 12:00 noon, on June 29th, 1926, for furnishing all labor and material for the construction of improvements in certain streets, known as Paving Districts 6-A 6-B and 6-C, in accordance with the plans and specifications on file in the office of the City Manager of said City.

The amounts of the principal items of the work will be approximately as follows:

215,950 cu.yds. Grading.
1,832,950 sq.ft. Sidewalk.
309,000 sq.ft. Driveways.
287,850 lin.ft. Concrete Combined Curb and Gutter.
590,450 sq.yds. Paving.
41,000 lin.ft. Sewers.

Bids must be accompanied by certified checks aggregating the amount of $150,000.00, made payable to the City of West Palm Beach, Florida, as a guarantee that within ten days from notice of awarding of contract, the successful bidder will enter into a written contract with the City, and furnish acceptable bond in the amount of one hundred per cent (100%) of the amount bid, conditioned upon the carrying out of said contract. Checks of unsuccessful bidders will be returned. Each bid must be sealed and addressed to the City Manager of the City of West Palm Beach, and shall be in the office of the City Clerk not later than 12:00 Noon on the 29th day of June, 1926.

Each bidder will be required to submit, with his bid, statements of experience, equipment and financial responsibility, on blank forms which will be furnished with the specifications.

Plans, specifications and blank proposals may be obtained at the office of the City Manager upon payment of a deposit of $25.00, to be refunded upon receipt of bid or return of said plans and specifications. The City Commission reserves the right to reject any or all bids and to award the contract in the best interests of the City of West Palm Beach, Florida.

H. J. DAUGHERTY,
City Clerk.
T. B. HENRY,
City Engineer.

C. A. BINGHAM,
City Manager.

Bids: June 29.

Road Reconstruction

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Mercer County for the reconstruction of the Trenton-Pennington Road in the Townships of Ewing and Hopewell, in the County of Mercer, with an 8 in. Reinforced Concrete surface upon a 6 in. compacted cinder foundation.

Estimated amount of concrete surface pavement required is 69,033 square yards; of cinder foundation, 69,033 square yards; and opened and read in public at Court House, Trenton, N. J., on Tuesday, June 29th, at 1:00 P.M. Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Harry F. Harris, County Engineer, and approved by the State Highway Commission, have been filed in the office of the said engineer at Trenton, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation.

Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to Board of Freeholders of Mercer County, and must be accompanied by a proposition of surety and statement of equipment and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of Board of Freeholders of
Mercer County,
WALTER C. FOWLER, Clerk.

OFFICIAL PROPOSALS

Bids: July 7.

Road Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION

Trenton, N. J.

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for:

ROUTE NO. 1 WIDENING, RAHWAY-METUCHEN

For the widening of Route No. 1 from Metuchen to Rahway in the County of Middlesex. Estimated 54,000 cu.yds. unclasified excavation; 47,514 sq.yds. penetration macadam shoulders; 336 sq.yds. plain concrete; 3 small span bridge extensions.

RT. NO. 14, SEC. NO. 14, MAYS LANDING-EGG HARBOR

For the construction of Route No. 14, Section No. 14, Mays Landing-Egg Harbor, in the County of Atlantic. Estimated 19,908 cu.yds. unclassified excavation; 80,213 sq.yds. double line reinforced concrete pavement; 81,872 sq.yds. gravel surface.

Bids for the above will be received at the office of the State Highway Commission, 9th floor Broad Street Bank Building, Trenton, New Jersey, on Wednesday, July 7th, 1926, at eleven o'clock (11:00 A. M.) Standard Time, and will be opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.) upon application to the State Highway Department, Room 901, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated in the 1926 specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER,
Secretary.

Bids: July 1.

Santiary Trunk Sewer

Canton, Ohio.

Sealed proposals will be received by the Director of Public Service, Canton, Ohio, until Twelve (12) o'clock noon, Central Standard Time, (One (1) o'clock p.m., Canton City Time), Thursday, July 1st, 1926, for furnishing labor and materials required for construction of Third Section of West Side Intercepting Sewer, according to plans and specifications on file in the Director's office.

Length of Sewer 11,250 feet—Brick, Segment block or Reinforced Concrete Pipe, Cast Iron special sections.

Copies of plans, specifications and proposal blanks can be had from the Director, upon the payment of Five Dollars ($5.00) per set, such proposal blanks must be used in submitting bids. Each bid must be accompanied by a bond or certified check on a solvent Bank located in the City of Canton, to the satisfaction of the Director, in the sum of Five Hundred Dollars ($500.00).

The right is reserved to reject any or all bids received, and to accept any which may be deemed most favorable to the City of Canton, Ohio.

JOS. A. GOSSETT,
Director of Public Service
W. E. SARVER,
City Civil Engineer.

OFFICIAL PROPOSALS

Bids: July 7.

Five Bridges

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION

Trenton, N. J

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commission of New Jersey for:

Reconstruction of five bridges on Route No. 7, Sections 6 and 7, as follows:

Bridge at M.P. 2.5 over Bentley's Brook, Middlesex County.

Bridge at M.P. 5.0 over Millstone River, Monmouth County.

Bridge at M.P. 7.5 over Stillhouse Brook, Monmouth County.

Bridge at M.P. 8.0 over Gander Brook, Monmouth County.

Bridge at M.P. 8.1 over Branch of Gander Brook, Monmouth County.

All of the bridges are of reinforced concrete decks on concrete abutments, the principal items of construction being 908 cu.yds. concrete; 24,000 lbs. reinforcing steel; 16,300 lbs. structural steel; 1027 cu.yds. foundation excavation; 3100 l.f. timber piles.

Bids for the above will be received at the office of the State Highway Commission, 9th floor, Broad Street Bank Building, Trenton, New Jersey, on Wednesday, July 7th 1926, at eleven o'clock (11:00 A. M.) Standard Time, and will be opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.) upon application to the State Highway Department, Room 901, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated in the 1926 bridge specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and name and section of the route and bridges on the outside, and must be accompanied by a certified check drawn to the order of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelope will be furnished on application. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened.

Each bidder must also accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications.

By order of the State Highway Commission.

A. LEE GROVER
Secretary.

Bids: July 19.

Street Paving

Apalachicola, Fla.

Sealed proposals, addressed to the undersigned and endorsed "Tender for Paving," will be received until 5 p.m., July 19th, 1926, for the paving with concrete of certain streets in the City of Apalachicola, Florida, according to plans and specifications in the office of the City Engineer and which plans may be there seen and examined after June 19th. The area to be paved is approximately 43,000 sq.yds., but may be varied within limits of 10 per cent more or less. Proposals are to be made on forms supplied by the undersigned and will be furnished on request. All proposals must be accompanied by a certified check for the sum of $1,000, payable to the City Treasurer, Apalachicola. Checks will be returned to bidders upon rejection of their bid and to the successful bidder upon execution of the formal contract. The City Commissioners reserve the right to consider the proposals at any time within five days after date set for final receipt and to accept any one or reject any or all of them.

F. B. WAKEFIELD,
City Treasurer.

Apalachicola, Florida.
June 11th, 1926.

OFFICIAL PROPOSALS

Bids: June 28.

State Road Work

Hartford, Conn.

SEALED PROPOSALS will be received by the State Highway Commissioner, 12 Washington Street, Hartford, Conn., until 2 p.m., EASTERN STANDARD TIME, on Monday, June 28th, 1926, for the following sections of State work, in accordance with plans and specifications on file at the following places:

TOWN OF WESTPORT & WILTON: About 19,277 linear feet of 2½ inch bituminous macadam over 7 inch broken stone base on the Westport-Wilton Road. NOTE: Bituminous material will be furnished by the State. Plans and specifications at the office of A. W. Bushell, Division Engineer, 106 Elm Street, New Haven, Conn.

TOWNS OF COLUMBIA & WINDHAM: About 4,415 linear feet of reinforced concrete pavement on the Hartford-Willimantic Road. NOTE: Portland cement, reinforced concrete pipe and core and joint filler will be furnished by the State. The core and joint filler will be installed on a force account basis. Plans and specifications at the office of John Smith, Division Engineer, Thayer Building, Norwich, Conn.

TOWN OF MANCHESTER: About 8,232 linear feet of 9 inch concrete pavement and 3 inch asphalt or 2½ inch amiesite over 7 inch reinforced concrete base on West Center St. NOTE: Portland cement will be furnished by the State. Plans and specifications at the office of R. W. Stevens, Division Engineer, 15 Lewis Street, Hartford, Conn.

TOWN OF PRESTON: About 5,400 linear feet of 7 inch native stone macadam on the Poquetanock-Hallville Road. Plans and specifications at the office of John Smith, Thayer Building, Norwich, Conn.

TOWNS OF WATERFORD AND MONTVILLE: About 13,150 linear feet of 8 inch reinforced concrete pavement on the Norwich-New London Road. NOTE: Portland cement and reinforced concrete pipe will be furnished by the State. Plans and specifications at the office of John Smith, Division Engineer, Thayer Bldg., Norwich, Conn.

TOWNS OF WESTPORT AND FAIRFIELD: About 10,248 linear feet of grading and drainage and 4,134 linear feet of 3 inch asphalt over 8 inch reinforced concrete base on the Boston Post Road. NOTE: Portland cement and reinforced concrete pipe will be furnished by the State. Plans and specifications at the office of A. W. Bushell, Division Engineer, 106 Elm St., New Haven, Conn.

TOWN OF FARMINGTON: About 1,778 linear feet of grading and about 1,000 linear feet of 7 inch waterbound macadam in connection with the elimination of grade crossing on the Scott Swamp Road. Plans and specifications at the office of R. W. Stevens, Division Engineer, 15 Lewis St., Hartford, Conn.

TOWN OF FARMINGTON: About 13,245 linear feet of 7 inch trap rock macadam on the Scott Swamp Road, including abutments for a 50 foot steel bridge. NOTE: This is exclusive of the work in connection with grade crossing elimination. Portland cement and reinforced concrete pipe will be furnished by the State. Plans and specifications at the office of R. W. Stevens, Division Engineer, 15 Lewis Street, Hartford, Conn.

TOWN OF NAUGATUCK: About 3,568 linear feet of 6 inch gravel surface on Rubber Avenue. Plans and specifications at the office of A. W. Bushell, Division Engineer, 106 Elm Street, New Haven, Conn.

TOWN OF NEW HARTFORD: A twin 14 foot span concrete slab bridge over Cotter Brook. NOTE: Portland cement will be furnished by the State. Plans and specifications at the office of D. C. Loewe, Division Engineer, Winsted, Conn.

TOWN OF CANTON: A concrete girder bridge of two 38 foot spans over Cherry Brook. NOTE: Portland cement will be furnished by the State. Plans and specifications at the office of R. W. Stevens, Division Engineer, 15 Lewis Street, Hartford, Conn.

All bids must be accompanied by a surety company or a certified check not less than one-third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut, June 18, 1926.

JOHN A. MACDONALD,
State Highway Commissioner,
12 Washington St., Hartford, Conn.

OFFICIAL PROPOSALS

Bids: July 21.

Bridge

CONSTRUCTION OF MARKET STREET BRIDGE

Wilkes-Barre, Luzerne Co., Pa.

Sealed bids or proposals for the construction of Market Street Bridge across the Susquehanna River in the City of Wilkes-Barre, Luzerne County, Pennsylvania, will be received by Harry T. Butts, Controller of Luzerne County, at his office in the Court House, Wilkes-Barre, Pennsylvania, until two o'clock p.m., the 21st day of July, 1926, at which time and place, or at a later time to be fixed by the Board of County Commissioners, the proposals will be publicly opened.

The work for which bids or proposals are hereby invited will consist of the moving and removal of the existing steel bridge, the maintenance of traffic, the removal of the existing stone masonry and the construction of a new bridge of reinforced concrete and stone.

The new bridge will be 93 feet wide and about 1,382 feet long. It will consist of twelve (12) arch spans, one of which will be 50 feet, five 82 feet each, one 100 feet, one 110 feet, and four 120 feet each.

A more complete description of the work to be done is given in Information for Contractors, Form of Contract, Specifications, Bond and Contractor's Proposal, also in the accompanying Contract Drawings, all of which are to be deemed a part of this Invitation.

Copies of the foregoing may be inspected at the office of the Board of County Commissioners, and may be purchased at the office of Benjamin H. Davis, Engineer, Whitehall Building, New York City, on and after the 28th day of June, 1926.

A deposit of One Hundred Dollars ($100.00) is required for a complete set of Form of Contract, Specifications, Bond, Proposal and Contract Drawings, which sum, less the cost of printing and forwarding, will be refunded upon the return of all the matter in good condition before the date of receipt of bids.

A certified check in the sum of Fifty Thousand Dollars ($50,000.00), made payable to Crawford C. Smith, Treasurer of Luzerne, must accompany each proposal.

Receipt of bids will be subject to conditions given in said "Information for Contractors."

The right is reserved to reject any and all bids.

HARRY T. BUTTS,
Controller of Luzerne County.

Bids: July 14.

Water Mains

Binghamton, N. Y.

Sealed proposals for Sanitary Work, Replacement and Extension of Water Mains, and Hydrants, Binghamton State Hospital, Binghamton, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y. until 2 o'clock p.m. (Eastern Standard Time) on Wednesday, July 14, 1926, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit as a guarantee that bidder will enter into contract if awarded same. Deposit shall consist of a certified check drawn upon some legally incorporated bank in the State of New York and made payable to the State of New York (or money) equal to five per cent (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty (50%) per cent of the amount of contract within thirty days after official notice of award of contract and in accordance with the terms of Specification No. 4698. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Binghamton State Hospital, Binghamton, N. Y. at the New York Office of the Department of Architecture, 18th Floor, Flatiron Bldg., Broadway & 23rd Street; and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained by persons or firms engaged in the line of work required at the discretion of the State Architect, from the Department of Architecture, Capitol, Albany, N. Y.
Dated: June 16, 1926.

OFFICIAL PROPOSALS

Bids: July 9.

Road Work

STATE DEPARTMENT OF PUBLIC WORKS BUREAU OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at the office, No. 353 Broadway Albany, N. Y., at one o'clock p.m., advanced standard time, which is twelve o'clock noon, Eastern Standard Time, on Friday, July 9, 1926, for the construction of highways in the following counties:

ALLEGANY .....(one highway: 7.43)
CATTARAUGUS .....(one highway: 6.65)
CORTLAND .....(one highway: 5.63)
DELAWARE .....(one highway: 5.31)
ROCKLAND Completion ...(one highway: 1.25)
SENECA .....(one highway: 4.90)
CHENANGO .....(one highway: 0.42)

ALSO FOR THE RECONSTRUCTION OF THE FOLLOWING:

ERIE .....(one contract: 3.17)
MONTGOMERY .....(one contract: 0.30)
ONONDAGO .....(one contract: 8.25)
SUFFOLK .....(one contract: 5.55)
WESTCHESTER...(two contracts: 3.27 & 1.67)
WARREN .....(one contract: 1.51)

Maps, plans, specifications, and estimates may be seen and proposal forms obtained at the office of the Bureau in Albany, N. Y., and also at the office of the division engineers in whose division the roads, to be constructed or reconstructed, are located. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

A. W. BRANDT,
Commissioner of Highways.

Bids: July 21.

Incinerator

Orlando, Fla.

The Mayor and City Commission of the City of Orlando, Florida, will receive sealed bids at the City Hall up to 9 o'clock a.m. Wednesday, July 21, 1926, for furnishing all labor and material and constructing an Incinerator guaranteed to burn forty (40) tons of average City Garbage, Dead animals, waste, etc., per day of eight (8) hours.

Bidders are required to furnish complete plans and specifications stipulating how soon said Incinerator could be completed and ready for operation and to indicate on said plans how additional units may be added from time to time in the future to meet the City's needs. Plans must include motor driven forced draft fan for each furnace, radical brick chimney one hundred (100) feet high and retaining walls for dirt fill driveways. Bidders must familiarize themselves with site on which Incinerator is to be built and meet such conditions as the site may impose.

Certified check, payable to the City of Orlando, in the sum of two thousand ($2,000) dollars, must accompany each bid as a guarantee that the bidder, if awarded the Contract, will enter into contract with the City to build and complete said Incinerator as per plans and specifications.

The City reserves the right to reject any or all bids.

L. M. AUTREY,
Mayor.

Attest:
J. A. STINSON,
City Clerk.

Bids: August 16.

Tenders for Electrical Machinery

Moose Jaw, Saskatchewan, Canada.

Tenders will be received up until 12 o'clock noon, August 16th, 1926, for the supply of:

1. One 5,000 K.W. Steam Turbo-Generator.
2. One Surface Condenser.

Tenders must be sealed and marked "Tender for Electrical Machinery" and addressed to the City Commissioners, City Hall, Moose Jaw, Saskatchewan, Canada.

Tenders must be accompanied by an accepted check or cash deposit equal to five (5) per cent of the total amount of the tender.

Specifications may be obtained upon application to J. D. Peters, Electrical Superintendent, Moose Jaw.

The City reserves the right to reject any or all tenders.

Signed W. W. DAVIDSON,
Mayor.
G. D. MACKIE,
City Commissioners.

OFFICIAL PROPOSALS

Bids: July 7.

Road Construction

South Bound Brook, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of South Bound Brook, at the Council Rooms, Main Street, South Bound Brook, N. J. on the 7th day of July, 1926, at 7:30 p.m., Eastern Standard Time, or 8:30 p.m., Daylight Saving Time, for the construction of Main Street from Canal Bridge southerly to the Borough Line.

APPROXIMATE QUANTITIES

Excavation (unclassified)	3,731 cu.yds.
7" Reinforced concrete pavement	4383.6 sq.yds.
8" Reinforced concrete pavement	11,326.7 sq.yds.
Concrete Curbing	4,150 lin.ft.
Catch Basins, complete	2
Catch Basin Heads (installed)	2
Removal of Trees (if ordered) each	
Storm Drain	36 lin.ft.

Plans and specifications for this work are on file, and information and blank forms may be obtained during business hours and plans may be obtained upon a deposit of $10.00 to T. L. Walters, Borough Clerk, South Bound Brook, N. J. or H. C. Van Emburgh, Borough Engineer, 149 North Avenue, Plainfield, N. J. Deposit will be returned upon the return of the plans.

Each bid must be accompanied by a certified check for not less than 10% of the amount of the bid, drawn to the order of the Borough Collector, and without any conditional endorsements. All checks except the two lowest bids will be returned immediately after the bids are opened. The other checks will be returned after contract and bond are properly executed.

Each bid must be accompanied by a certificate from a surety company authorized to do business in the State of New Jersey, stating that they will furnish the required bond if the contract is awarded to them.

The successful bidder will be required to furnish a surety bond for the full amount of the contract.

If the successful bidder shall refuse or neglect to sign the agreement and furnish the bond within ten (10) days of the awarding of the contract, his check shall be held by the Borough of South Bound Brook as liquidated damages for such refusal or neglect. The Mayor and Council reserve the right to reject any or all bids.

H. C. VAN EMBURGH,
Borough Engineer.

T. L. WALTERS,
Borough Clerk.

Bids: June 29.

Paving

Rutherford, N. J.

Sealed proposals will be received by the Council of the Borough of Rutherford, New Jersey, in the City Hall, Park Avenue, at a special meeting on June 29, 1926 at 8:15 o'clock, Daylight Saving Time, for the construction of Reinforced Concrete Pavement and appurtenances on Orient Way between Station Square and Rutherford Ave.

Plans and specifications and form of Proposal may be obtained at the office of H. E. Allen, Borough Engineer upon deposit of $10.00, which deposit will be returned upon receipt of Plans and Specifications in good condition.

No proposals will be received previous to the hour designated in this notice and none will be received afterward.

Proposals must be made out on the Standard Proposal Forms in the manner designated in the specifications and each proposal must be accompanied by a certified check for Twelve Thousand ($12,000) Dollars, made payable to the Borough of Rutherford, New Jersey.

A surety bond for the full amount of the contract will be required from the successful bidder.

The Council reserves the right to reject any and all bids.

F. A. STEDMAN,
Borough Clerk.

Rutherford, N. J.,
June 17, 1926.

EXCAVATION

Steam Shovels for rent with crews or work taken by contract.

Dinkeys and cars or teams furnished.

H. C. AMBLER
3717 Old York Road, Philadelphia, Pa.

OFFICIAL PROPOSALS

Bids: July 9.

Repair of the Tomhannock Spillway

BUREAU OF WATER,
DEPARTMENT OF PUBLIC WORKS
Troy, N. Y.

Sealed proposals, marked "Proposals for the Repair of the Tomhannock Spillway" with sureties attached, will be received by the Board of Contract and Supply of the City of Troy, at its office in the City Hall, at a meeting to be held on Friday, July 9th, 1926, at 11:00 a.m., Daylight Saving Time, which is 10 a.m. Eastern Standard Time.

At this meeting and at the time above mentioned, the sealed proposals for the repair of the Tomhannock Spillway, will be received, publicly opened and officially declared by the said Board.

The following are the approximate quantities which will enter into the contract.

1. 1,265 Cubic Yards of Concrete Removed.
2. 2,900 Cubic Yards of Excavation.
3. 3,445 Cubic Yards of Concrete placed.
4. 56,000 Pounds of Steel Reinforcement.
5. 5,400 Square Feet of Waterproofing.
6. 1,455 Lineal Feet of Expansion Joints.

Maps, plans and Specifications may be seen and obtained on and after June 26, 1926, at the office of the Commisioner of Public Works, in the City Hall and at the office of the Consulting Engineer, G. Saxton Thompson, Room 7, 257 Broadway, Troy, N. Y., upon the deposit of Five Dollars ($5.00) which amount will be refunded upon the return of the plans and specifications in good condition.

The special attention of bidders is called to the "Instructions to Bidders" in the specifications.

Each Proposal must be clearly marked, "Proposal for the Repair of the Tomhannock Spillway, Troy, N. Y.," and must be made out on the proposal forms obtained with the plans and specifications.

Each Proposal must be accompanied by cash, draft or certified check payable to the order of the City Treasurer for an amount at least equal to five per cent of the amount of the proposal.

The successful bidder will be required to execute a bond in an amount equal to the contract price with sufficient sureties to be approved by the Board, and to execute the contract within seven days after the award thereof.

The Board of Contract and Supply reserves the right to reject any and all bids.

HELEN G. RICHMOND,
Secretary.

June 22, 1926.

Bids: July 9.

County Roads

White Plains, N. Y., June 22, 1926.

Sealed bids or proposals for paving the following roads will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, New York, until 10 a.m. (Daylight Saving Time), Friday, July 9th, 1926:

REINFORCED CONCRETE

County Road No. 34—Cherry St., Bedford, 2.18 mi.

County Road No. 56—Banksville Rd., Northcastle, 0.37 mi.

County Road No. 38—Park Avenue, Rye, 0.63 mi.

REINFORCED CONCRETE AND VITRIFIED BRICK

County Road No. 37—Main St., Tuckahoe, 0.50 mi.

REINFORCED CONCRETE AND GRANITE BLOCK

County Road No. 55—West Main St., Mt. Kisco, 0.17 mi.

Specifications, proposal sheets and all information relative to same may be procured at the office of the County Engineer upon making the required deposits, which will be refunded upon the return of the plans in good condition within thirty (30) days of the date of receiving bids.

BOARD OF SUPERVISORS.
FRED L. MERRITT,
Clerk.

THE WEAK LINK

Good plant equipment, efficient help, sufficient capital and safe insurance advice builds a strong chain. Swart clients have the former—Swart Service delivers the latter—result: prestige with the underwriters. The rates are no more.

HARMON V. SWART
Insurance Adviser—Rate Specialist
92 William Street, New York.

OFFICIAL PROPOSALS

Bids: July 14.

State Highway Work

Dover, Del.

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until 2 o'clock P. M., July 14, 1926, and at that place and time publicly opened, for contracts involving the following approximate quantities:

CONTRACT 68

Cedar Neck School towards Milford 2.10 Miles
6-10 Acres Clearing
6-10 Acres Grubbing
4700 Cu. Yds. Excavation
300 Cu. Yds. Borrow
2800 Tons Broken Slag Base Course for Secondary Roads
200 Lin. Ft. 15-in. Corrugated Metal Pipe
50 Lin. Ft. 18-in. Corrugated Metal Pipe
30 Lin. Ft. 39-in. R. C. Pipe.

CONTRACT CN33

Townsend-Dexters Cor. 4.2 Miles
1¼ Acres Clearing
1¼ Acres Grubbing
10000 Cu. Yds. Excavation
1000 Cu. Yds. Borrow
5800 Tons Broken Slag Base Course
400 Lin. Ft. 15-in. Corrugated Metal Pipe
60 Lin. Ft. 18-in. R. C. Pipe
50 Lin. Ft. 24-in. R. C. Pipe
30 Lin. Ft. 26-in. R. C. Pipe
8M Ft. BM Timber for Structures

CONTRACT CS54

Harbeson-Indian Mission 4.71 Miles
7 Acres Clearing
7 Acres Grubbing
14000 Cu. Yds. Excavation
400 Cu. Yds. Borrow
6850 Cu. Yds. Cement Concrete Pavement
OR 6850 Cu. Yds. Cement Concrete Pavement (Slag Aggregate)
70 Cu. Yds. Class "A" Concrete
2600 Lbs. Reinforcement
300 Lin. Ft. 15-in. Corrugated Metal Pipe
140 Lin. Ft. 15-in. R. C. Pipe
56 Lin. Ft. 18-in. R. C. Pipe
72 Lin. Ft. 24-in. R. C. Pipe
28 Lin. Ft. 30-in. R. C. Pipe
28 Lin. Ft. 36-in. R. C. Pipe
1800 Lin. Ft. Wood Shoulder Curb

Performance of contract shall commence within ten (10) days after execution of the contract and be completed as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the construction of State Highway Contract No.."

The Contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Detailed plans may be seen and index plans and specifications may be obtained upon receipt of two dollars ($2.00) which amount will not be refunded.

STATE HIGHWAY DEPARTMENT,
Dover, Delaware.

Bids: July 6.

Paving, Curbing and Draining

Bound Brook, N. J.

Sealed bids will be received by the Mayor and Borough Council of the Borough of Bound Brook, N. J., for the construction of a concrete pavement, concrete curbing and Storm Drains in Mountain Avenue between Main Street and Union Ave.

Said bids will be received at a meeting of the Borough Council to be held on Tuesday, July 6, 1926 at seven p.m. (Standard Time).

The principal items of construction are 2,400 cubic yards excavation; 5,600 square yards reinforced concrete pavement; 3,700 lineal feet concrete curbing; 1,440 lin.ft. storm sewer.

Drawings and Specifications for the proposed work may be obtained from the Borough Engineer.

E. L. BELLI,
Borough Clerk.

U. S. Government

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA. Sealed proposals will be received here until 11 a.m., June 29, 1926, and then opened, for constructing a frame lock house at Lock No. 7, Muskingum River. Further information on application.

UNITED STATES ENGINEER OFFICE, Room 710 Army Building, 39 Whitehall Street, New York, N. Y. Sealed Proposals will be received here until 12 m., (Daylight Saving Time), June 28, 1926, and then opened, for dredging and rock removal in Hudson River, N. Y. Further information on application.

U. S. ENGINEER OFFICE, Providence, R. I. Sealed proposals will be received here until 12 o'clock, noon, daylight saving time, July 2, 1926, and then opened, for dredging in New Haven Harbor, Conn. Further information on application.

OFFICE, MISSISSIPPI RIVER COMMISSION, 1st and 2nd Districts, McCall Building, Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., July 9, 1926, and then opened, for one steel hull for Concrete Mixing Plant. Further information on application.

SEALED PROPOSALS, marked "Proposal for Construction of Buildings and Utilities," will be received by the U. S. Veterans Bureau, Room 791, Arlington Building, Washington, D. C. until 11 A. M. July 27, 1926, and then and there publicly opened for the construction complete of Administration Building, Infirmary Building, Dining Hall, six Continued Treatment Buildings, Recreation Building, Occupational Therapy Building, Acute Patients Building, Laundry Building, Storehouse, Garage, Boiler House, two Attendants Quarters, two Nurses Quarters, Apartment Building, five Duplex Officers Quarters, Medical Officers Quarters, Gate House, Switch and Meter House, Connecting Corridors, and Brick Chimney, also roads, walks and drainage to be built at U. S. Veterans Hospital, Northport, Long Island, N. Y. This work will include reinforced concrete construction, hollow tile, brickwork, cast concrete stone, marble work, tile floors and wainscots, ironwork, steel sash, iron stairs with slate treads, wrought iron fence, slate, metal, built-up and prepared roofing, roof ventilators, roof skylights, metal lathing, plastering, carpentry, dumb waiters, metal weather strips, insect screens, hardware, painting, glazing, plumbing, sewage disposal, boiler plant, steel water tower and tank, septic tank and house, well pump houses, heating, concrete oil tank and oil burners, electrical work, electric elevators, refrigerating plant, and outside sewer, water, steam and electric distribution systems. *Separate Proposals* will be received for Building Construction, Plumbing, Heating, Concrete oil tank and oil burners, Electrical Work, Elevators, Ice-making and Refrigerating Plant, and brick Chimney, all as set forth on proposal sheet. Proposals will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract; and in making awards, the records of bidders for expedition and satisfactory performance on contracts of similar character and magnitude will be carefully considered. At the discretion of the Director, drawings and specifications may be obtained upon application to the Construction Division, Room 791, Arlington Building, Washington, D. C. Deposit with application of a check or postal money order for $100.00 payable to the TREASURER OF THE UNITED STATES is required as security for safe return of the drawings and specifications within ten days after date of opening proposals. Frank T. Hines, Director, June 19, 1926.

U. S. ENGINEER OFFICE, 725 Central Building, Los Angeles, Calif. Sealed proposals will be received here until 11 a.m., July 29, 1926, and then opened, for dredging in Los Angeles Harbor, California. Further information on application.

U. S. ENGINEER OFFICE, Charleston, S. C.—Sealed proposals will be received here until noon, July 1, 1926, and then opened, for extending the north Customhouse pier about 210 feet. Further information on application.

U. S. ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2 p.m., central time, July 15, 1926, and then opened, for metal work for navigable pass, Dam 53, Ohio River. Further information on application.

U. S. ENGINEER OFFICE, Milwaukee, Wis. Sealed proposals will be received here until 3 p.m., June 28, 1926, and then opened, for constructing breakwater at Milwaukee Harbor, Wis. Further information on application.

U. S. ENGINEER OFFICE, Wilmington, Del.—Sealed Proposals will be received here until 11 a.m. (Eastern Standard Time), June 29, 1926, and then opened, for dredging in inland waterway from Delaware River to Chesapeake Bay, Delaware and Maryland (Chesapeake and Delaware Canal). Further information on application.

PROPOSALS FOR LEVEE WORK—Office of Third Mississippi River District, P. O. Box 404, Vicksburg, Miss. Proposals for 840,000 cubic yards of levee work in quantities varying from 100,000 to 500,000 cubic yards, will be received here until 10 a.m., July 7, 1926. Information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., June 14, 1926. SEALED PROPOSALS will be opened in this office at 3 p.m., July 7, 1926, for repairs to the mechanical equipment in the U. S. Treasury and Liberty Loan Buildings, Washington, D. C. Specification may be obtained from this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGR. OFFICE, Providence, R. I. Sealed proposals will be received here until 12 o'clock noon, daylight saving time, July 23, 1926, and then opened, for repairing breakwaters at Point Judith Harbor, R. I. Further information on application.

EMPLOYMENT

POSITIONS VACANT

POSITIONS WANTED

POSITIONS VACANT

A FIRST-CLASS male stenographer wanted, with secretarial experience. Apply by letter or in person to Mr. J. W. Connell, Vice-President, The Dravo Contracting Company, Neville Island Plant, Pittsburgh, Pa.

A MECHANICAL engineer for heating ventilating, high-pressure piping, make plans and specifications, estimate, supervise. Old established firm in central New York. State age, experience, salary expected. Give reference. P-585, Engineering News-Record, Tenth Ave. at 36th St., New York.

APPLICATIONS will be received from field and office engineers and draftsmen skilled in design and construction of sewers and sewage disposal. Positions carrying salaries ranging from $7,000 to $1,800 are open on important work within fifteen miles of New York under direct supervision of undersigned. Period of service approximately two years. Apply, stating salary expected with references and outline of experience. Alexander Potter, Consulting Engineer, 50 Church Street, New York City.

Prepare for a Bigger Job

Foremen, Timekeepers, Clerks, become Estimators and Construction Managers by spare time study. Full particulars sent upon request.

TYREAN INSTITUTE

15 E. Grove St., Palmer, Mass.

POSITIONS VACANT

BUILDING superintendents, general carpenter and labor foremen wanted for long job out of town. Give full record of experience, references and salary expected in first letter. P-507, Engineering News-Record, Tenth Ave. at 36th St., New York.

CONSTRUCTION man. A large construction company with offices in New York and Chicago requires immediate services of a man with general experience in buying, contracts, estimating, and construction supervision. He must have thorough previous experience in all departments with reputable builders; must be able to handle all matters with owners and architects; must be a good organizer, and assume full responsibility for results. Salary to start $7,500 and good opportunity for advancement. Only high grade and qualified men need apply. Write experiences and references. P-590, Engineering News-Record, Tenth Ave. at 36th St., New York.

CIVIL engineer, for railroad maintenance work; surveying, drafting and valuation order work. Salary $160-$170 per month. State education and experience. Write P-594, Engineering News-Record, 1600 Arch St., Philadelphia, Pa.

DRAFTSMEN—Experienced in shop drawings for structural steel. Apply by mail only, giving age, nationality, education, experience and salary expected. Post & McCord, 101 Park Avenue, New York.

POSITIONS VACANT

DRAFTSMEN experienced in detailing and checking structural steel. Position permanent. Excellent chance for advancement. State age, experience, and salary. Only first-class men need apply. St. Louis Structural Steel Co., St. Louis, Mo.

DRAFTSMEN, detailers and checkers, experienced in shop drawings for structural steel. Good opportunity and plenty of overtime for men of ability. P-579, Engineering News-Record, Tenth Ave. at 36th St., New York.

DRAFTSMAN—Recent civil engineering graduate, who is neat draftsman and alert man. Splendid chance for advancement into sales work for right man. Truscon Steel Co., 1505 Race Street, Philadelphia, Pa.

DRAFTSMAN wanted for general railroad work. Applicant must be graduate of recognized technical school with at least two years' past experience in railroad work. In answering submit sample of recent drafting work, statement of age, experience and salary expected. Address applications to E. F. Robinson, Chief Engineer, Buffalo, Rochester & Pittsburgh Ry., Rochester, N. Y.

DRAFTSMAN wanted, experienced in light structural steel and conveying equipment by construction company. State experience in full and salary desired. P-570, Engineering News-Record, Tenth Ave. at 36th St., New York.

EMPLOYMENT

AND OTHER BUSINESS OPPORTUNITIES

Positions Wanted, 4 cents a word, minimum charge 75 cents an insertion.
Positions Vacant and all other classifications, 8 cents a word, minimum $2.

Box Numbers in care of any of our offices count as 10 words in addition to advertising copy. *Replies* are forwarded each day as received at all of our offices without additional charge. *Discount* of 10% is allowed if one payment is made in advance for 4 consecutive insertions.

THE ABOVE RATES ARE FOR ADVERTISEMENTS SET UNDISPLAYED. FOR DISPLAY RATES SEE "USED EQUIPMENT" HEADING.

E.N.R.

(Continued from the opposite page)

POSITIONS VACANT

ESTIMATOR and designer for reinforced concrete wanted; position permanent; bar company experience preferred. State age, education, experience and salary expected. American Steel Engineering Co., Granite Bldg., Pittsburgh, Pa.

EXPERIENCED engineer wanted to take charge of several field parties. Applications must give experience in full, furnish references, and state salary expected. P-538, Engineering News-Record, 1600 Arch St., Phila., Pa.

EXPERIENCED highway engineers wanted as inspectors, draftsmen and chiefs of party anywhere in Pennsylvania, state training experience, names of previous employers, date available, location desired and minimum salary expected. Apply by letter or in person to the Personnel office State Department of Highways, Harrisburg, Pa.

EXPERIENCED right of way men wanted for work in southeast. Applications must give experience in full, furnish references and state salary expected. P-539, Engineering News-Record, 1600 Arch St., Phila., Pa.

POSITIONS VACANT

EXPERIENCED detailer and checker for structural steel. Plant located in Newark, N. J. In applying give experience and salary expected. P-581, Engineering News-Record, Tenth Ave. at 36th St., New York.

Civil Engineer —Sales

Who can speak German, with at least three years' experience in railway field, for technical sales work in South America. Must be single, aggressive, have good record, and good personality. $2,700.00 to $3,000.00 to start. Send photo with first letter for serious consideration.

P-541, Engineering News-Record,
Guardian Bldg., Cleveland, O.

POSITIONS VACANT

EXPERIENCED draftsmen wanted to design coal tipples and conveying equipment. Desire men who are fast and accurate layout men. Location Northern West Virginia. Excellent prospects for advancement. Write H. N. Robinson, 506 State Theatre Building, Pittsburgh, Pennsylvania, for appointment.

ESTIMATOR and manager's assistant with experience in estimating, purchasing and job supervision in all classes building construction, for permanent position with large Chicago Construction Company. State age, experience, salary desired and when available. P-568, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

GENERAL manager wanted for steel plate fabricating shop. Capacity 75 men. Located within 75 miles from New York and Philadelphia. Give full experience with reply. P-560, Engineering News-Record, Tenth Ave. at 36th St., New York.

MECHANICAL draftsman wanted, experienced in detail shop drawing, by a large eastern manufacturing plant. Name full details and salary expected. P-536, Engineering News-Record, 1600 Arch St., Phila., Pa.

Start now

to Pull Yourself Out of the "Ordinary" Class

The woods are full of just plain engineers. But the "out of the ordinary" man is still sought after. A prominent engineering firm that recently employed one of our *Structural Engineering* students wrote us—

"If at any time you have an especially good man, you may send him in, as we always have openings for men who are above the average in ability."

Hundreds of engineers of the "get ahead" type are adding years of experience and a generous store of knowledge to their make-ups by giving a few spare hours a week to study of the famous WILSON course in

WILSON COURSES

- *Structural Engineering.*
- *Reinforced Concrete Engineering.*
- *Structural Steel Designing.*
- *Structural Drafting.*
- *Concrete Drafting*
- *Concrete Railway Structures.*
- *Railway Bridge Engineering.*
- *Concrete Highway Structures.*
- *Highway Bridge Engineering.*
- *Preparatory Course.*

Structural Engineering

(By Mail)

This is a real "experience" course requiring students to do actual work just as it is done in big engineering offices. It includes a review of fundamentals, reinforced concrete structures, structural steel designing and plenty of practical work. It affords a training that cannot be had in any way except by years of hard labor and constant shifting of jobs in order to come in contact with the many classes of structures included in the broad field of structural engineering. You didn't get this work in college—and you won't get it in published books. Graduate engineers all over the world are WILSON students. They are pulling out of the "ordinary" class.

Write for Literature

15th Year

WILSON ENGINEERING CORPORATION
College House Offices, Harvard Square, Cambridge, Mass.

STRUCTURAL STEEL MEN

See business opportunity offered to experienced men, in two-inch display advertisement following these columns, keyed BO-529, on page 148.

Civil Engineer —Sales

Who can speak Spanish, and who has had at least four years' highway work, for technical sales work in South America. Must be single, aggressive, have good personality and good record. $2,700.00 to $3,000.00 to start. Send photo with first letter for proper consideration.

P-540, Engineering-News Record,
Guardian Bldg., Cleveland, O.

WANTED

MECHANICAL DRAFTSMEN

Men familiar with layout and detail in elevating, crushing, and conveying equipment, with structural steel experience preferred.

In your letter give detailed account of experience, age, nationality, salary expected, and date you can report for work.

Aluminum Company of America
Massena (St. Law. Co.), N. Y.

POSITIONS VACANT

DRAFTSMAN, structural, to detail and check on building work. Must be able to consult with our customers and carry work through without assistance. Steady work at $265 per month for satisfactory man. Location Southern Ohio. P-551, Engineering News-Record, Guardian Bldg., Cleveland, Ohio.

DRAFTSMEN wanted for large copper property in South America. Applicant should be experienced mill and smelter draftsman, familiar with structural steel and reinforced concrete design. Healthy climate, good living conditions, all traveling expenses paid. State fully age, experience and when available. Address X. H., Post Office Box 822, City Hall Station, New York City.

PITTSBURGH, Des Moines Steel Company, Pittsburgh, Pennsylvania, desires several recent graduates in civil engineering.

SEVERAL young engineers wanted with a bent for field inspection to work under a general superintendent. P-567, Engineering News-Record, Tenth Ave. at 36th St., New York.

SEVERAL young graduates wanted with a bent for structural design who are able to pay their way by good drafting while gaining experience. P-566, Engineering News-Record, Tenth Ave. at 36th St., New York.

STRUCTURAL draftsman-designer wanted for building work, New York office. Bridge experience also desirable. Give qualifications, experience, references and salary expected. P-535, Engineering News-Record, Tenth Ave. at 36th St., New York.

STRUCTURAL draftsmen—Several experienced detailers and checkers on New York building work. Hedden Iron Construction Co., Hillside, N. J.

STRUCTURAL steel and railroad bridge draftsman wanted. State age, nationality, education, experience in full, salary expected and the date you can report for work. Address P. G. Lang, Jr., Engineer of Bridges, Baltimore and Ohio Railroad Company, Baltimore, Md.

STRUCTURAL steel estimator experienced in contracting for fabricated steel work. Excellent opportunity for a man with good personality and able to produce results to become connected with one of the largest and most progressive fabricators in this section. Location Detroit, Michigan. Can also use several men experienced in checking and making shop drawings for structural steel. P-531, Engineering News-Record, Guardian Bldg., Cleveland, Ohio.

STRUCTURAL DRAFTSMAN: Wanted structural draftsmen with not less than two years' experience with fabricating company on industrial and miscellaneous building work. College graduate. Permanent, if satisfactory. Rock Island Bridge & Iron Works, Rock Island, Ill.

STRUCTURAL engineer, experienced on hoisting and conveying machinery. Must be capable of designing and figuring stresses in gantry bridges. In reply state age, experience, salary and technical education. P-580, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

SUPERINTENDENT for sewer work. Engineer preferred. Applicant should give age, experience, date available, and salary expected. The Hannon-Hughes Construction Co., 911 Atlas Bank Bldg., Cincinnati, Ohio.

SURVEYORS, young single men for work in Central America. Salary $125 per month. Apply D. J. Cloward, 22 N. Woodward Ave., Roselle, Wilmington, Delaware.

WANTED, draftsman, ornamental iron work detailer, familiar with stairwork and cast iron work for buildings; state age, experience, salary desired; give references. Apply James McKinney & Son, 927 Broadway, Albany, N. Y.

WANTED civil engineer graduate, two years' experience, service Santo Domingo general field and office work. Apply by letter, Room 700, 165 Broadway, New York, N. Y.

POSITIONS VACANT

WANTED foreman capable of taking charge and moving Blaw Knox box type forms. Must be well qualified on form work. State experience and wages expected. Address, J. A. Mercier Co., Box 31, Lincoln Park, Mich.

WANTED, experienced structural draftsmen with knowledge of coal handling equipment desirable. Location Northern West Virginia. Write H. N. Robinson, 506 State Theatre Building, Pittsburgh, Pa., for appointment.

WANTED a man for air work on bridge foundation. Must have reference. Apply A. W. Robertson, Limited, 1680 St. Patrick St., Montreal, Que., Canada.

WANTED: Graduate engineer as draftsman. Should have satisfactory experience in reinforced concrete designing. Field experience is also desirable. State full particulars and salary desired. Howerton Engineering Company, Asheville, N. C.

WANTED—Have openings for superintendents and foremen experienced in construction of cement mills, crushing plants and grain elevators. Address Burrell Engineering & Construction Co., 513 W. Jackson Blvd., Chicago, Illinois.

WANTED immediately a general foreman, experienced in laying cast iron water mains. Apply to W. E. Sexton, Andrews Bldg., Mineola, N. Y.

EMPLOYMENT AGENCIES

AMERICAN Engineers Service, Emich Bldg., Pittsburgh, requires for general proposals: Design engineers, chief draftsmen, general detail draftsmen for hydraulic, electrical, structural, industrial and railway engagements; employers everywhere offered proposals freely.

WANTED immediately, 6 highway plan draftsmen-estimators, Eastern state, $160; 2 highway plan draftsmen, Southwest, $160; highway bridge designing draftsmen, $165-$200; recent graduate structural draftsman, bridge design, $125. Apply Business Men's Clearing House, Denver, Colorado.

EMPLOYMENT SERVICE

EXECUTIVES, engineers, find our individual, confidential service effective in making new connections. Personally planned by Mr. Jacob Penn, the eminent employment authority, known to leading business men throughout America. Refund agreement protects you. Not agency. Jacob Penn, Incorporater, 305 Broadway, New York.

IF YOU are qualified for position between $2,500 and $25,000 and are receptive to negotiations for new connection, your response to this announcement is invited. The undersigned provides a thoroughly organized service, established sixteen years ago, to conduct confidential preliminaries, and assist the qualified man in locating the particular position he desires. Not an employment agency. Retaining fee protected by refund provision, as stipulated in our agreement. Send name and address only for description of service. R. W. Bixby, Inc., 272 Main Street, Buffalo, New York.

TECHNICAL SERVICE
217 Broadway, New York, N. Y.
Specialists in
TECHNICAL PERSONNEL

Engineering Employment Service
For
EMPLOYEES AND EMPLOYERS
UNIVERSITY PLACEMENT BUREAU
154 Nassau St., New York City
Phone Beekman 1572

POSITIONS WANTED

Civil Engineers

CHIEF of party, 36 years, 12 years' experience in sewers, pavements, allottments and state highways. Salary $200, available after July 1st. PW-571, Engineering News-Record, 1600 Arch St., Phila., Pa.

CIVIL engineer and construction superintendent, age 40, 20 years' experience on railroad, highway, bridge, concrete, and other general construction; location surveys, plans, estimates, reports, and general office supervision; at present employed, but wish to make change, preferably with contracting or engineering firm. PW-478, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

CIVIL engineer, 36, married, temporarily employed, desires permanent position. Technical graduate, 17 years' experience (4 foreign) public utilities; tract, roadway, construction, estimates, valuation. Successful record as engineer and executive. PW-499, Engineering News-Record, Tenth Ave. at 36th St., New York.

CIVIL engineer, 39, married, desires position in Cuba or Mexico. Many years' experience irrigation, highway and railroad office and field work. Understands Spanish. PW-532, Engineering News-Record, Tenth Ave. at 36th St., New York.

CIVIL engineer, experienced in contractors, engineering and accounting. Three years bridge construction, two years managing engineering firm. Southern location preferred. Age 28, graduate engineer, single. Wish permanent connection with responsible contractor. PW-572, Engineering News-Record, 1600 Arch St., Phila., Pa.

CIVIL engineer, experienced in dam and power house construction, age 35, university graduate, available July 1st. Salary $500. PW-569, Engineering News-Record, 883 Mission St., San Francisco, Cal.

CIVIL engineer, experienced in railroad transportation field and familiar with handling terminal problems and traffic congestion, seeks connection with an engineering firm or civic body engaged in railroad terminal planning or the problem of traffic relief. PW-582, Engineering News-Record, 1600 Arch St., Phila., Pa.

CIVIL engineer graduate desires connection with contractor. Six years' field and office experience in highway and building construction. PW-492, Engineering News-Record, 1600 Arch St., Phila., Pa.

CIVIL engineer; broad experience; chief of party; subdivision, townsite, highways. Construction superintendent: Buildings, bridges, culverts and road work. Available July sixth. PW-591, Engineering News-Record, 1600 Arch St., Philadelphia, Pa.

GRADUATE civil engineer, 25, married, desires western location on water supply, irrigation or hydro-electric work; three years field and one teaching experience; available July 10. PW-522, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

Jacobson Commissary Company
105 W. Monroe St.
Chicago
Phone—Central
2563—2564

Labor Offices:
355½ Bowery
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Chicago
1295 E. 9th St.
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434 4th Ave.
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Labor Contractors, Boarding Camps, Commissaries, Industrial Camps.
Operators for
Penna. R. R., L. I. R. R., The Foundation Co.
We operate anywhere

POSITIONS WANTED

Bridge and Structural

STRUCTURAL engineer, university graduate, age 37, married; 15 years' experience, detailing, designing and estimating structural steel and reinforced concrete buildings and bridges. Will be open for an engagement about Aug. 1, 1926. Location either Philadelphia or Baltimore. PW-562, Engineering News-Record, 1600 Arch St., Phila., Pa.

Draftsmen and Designers

ASSISTANT draftsman on railroad valuation, or map work. Good letterer, and can render in color. PW-533, Engineering News-Record, Tenth Ave. at 36th St., New York.

DRAFTSMAN, with 13 years' experience in railroad and highway engineering, desires position. Good draftsman, letterer and computer. PW-555, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

DRAFTSMAN-DESIGNER, steel reinforced concrete. Experience Eastern, Western. Can frame, calculate and draw structures. 20 Bank St., New York City.

DRAFTSMAN civil engineer, present employed, 3 years' experience in structural steel detailing checking, wants pasition as designer, $45 weekly. PW-564, Engineering News-Record, Tenth Ave, at 36th St., New York.

Estimators

ESTIMATOR, general superintendent, engineer, age 42, broad experience in estimating and supervising all classes of general construction. 25 years' experience on concrete pavements, sewers, waterlines, reservoirs, sewage disposal plants, industrial buildings of concrete and brick, bridges and foundations. At present employed but wish to make change. Salary $500.00 per month. Location immaterial. PW-421, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

ESTIMATOR and construction engineer open for engagement, fifteen years' of practical experience in estimating and supervising all types of building construction. PW-576, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

Surveyors

SURVEYOR: 20 years' experience, railway, city, land subdivision and government surveys. W. Lehfeldt, 375 46th St., Milwaukee, Wis.

Notice to Advertisers!

Owing to the holiday—Monday, July 5th, for the official observance of Independence Day—the "Searchlight" pages of the July 8th issue of

Engineering News-Record

will close for press a day earlier than usual. Therefore

Changes of Copy

and **New Advertisements**, including those under the Emloyment classifications, should reach us by

5 P.M. Friday, July 2nd

PROPOSAL advertisements will be acceptable until 9 A.M. Tuesday, July 6th.

POSITIONS WANTED

Superintendents

ASSISTANT superintendent or timekeeper —can layout work and supervise men, also take quantities off plans; three years' college engineering education; more than three years' experience on large building construction work. PW-462, Engineering News-Record, Tenth Ave. at 36th St., New York.

CONSTRUCTION superintendent, eighteen years' experience in all classes of construction including plain and reinforced concrete, available immediately, go anywhere. PW-589, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

CONSTRUCTION superintendent, 35; industrial, commercial and apartments, bridges, etc., 14 years' experience. Available at once, anywhere. PW-588, Engineering, News-Record, Tenth Ave. at 36th St., New York.

GENERAL superintendent for building construction. Thirty years' actual experience all kinds of construction work. Salary $7,000. PW-489, Engineering News-Record, Tenth Ave. at 36th St., New York.

PAVING superintendent, concrete or asphalt. Age 40. Particularly good on plant layouts. Mechanical problems, etc. Anywhere. Box 1033, Pueblo, Colorado.

ROAD construction superintendent; several years highway builder in Illinois and Missouri. Understands the business and can deliver yardage at minimum cost. Present employed. Box 87, Osborn, Mo.

SUPERINTENDENT, state roads, or any class of earth, rock, concrete work; experienced; real organizer. Reference exchanged. PW-496, Engineering News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT or general foreman desires position, available on short notice. Have broad experience in all difficult foundations, steel and concrete bridges, also concrete paving. Can furnish best of reference; location immaterial. F. O. Gerhardt, Dyer, Arkansas. Box 71.

SUPERINTENDENT and graduate civil engineer, 10 years' experience heavy concrete construction, general municipal work and railroad construction; age 31, married; references. PW-548, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

SUPERINTENDENT — General foreman, carpenter by trade, 20 years' practical experience in charge various different projects, all classes concrete, buildings, foundations, pile driving, excavations, coffer dams, bridges, piers, etc. PW-595, Engineering News-Record, Tenth Ave. at 36th St., New York.

SUPERINTENDENT carpenter foreman on concrete construction work. 20 years' experience. Can give best of references as to ability and reliability. Union. PW-592. Engineering News-Record, Tenth Ave. at 36th St., New York.

RESPONSIBLE POSITION

Desired by

Engineer with ten years of varied office and field experience. Willing to go abroad. Now earning $3200.

PW-577, Engineering News-Record
Tenth Ave. at 36th St., New York City

AVAILABLE AT ONCE

Graduate Civil Engineer (M. I. T.)
12 years experience primarily Highway Construction.
Present salary $5000.
Location immaterial.

PW-587, Engineering News-Record
Tenth Ave. at 36th St., New York City

Having Done Engineering and Contracting for the past several years in Railroad work such as grading, concrete track work, etc., am desirous to connect with either large or small contractor. Can secure invitations for considerable work difficult to obtain. Best references.

PW-519, Engineering News-Record
1600 Arch St., Philadelphia, Pa.

POSITIONS WANTED

Miscellaneous

CONSTRUCTION engineer, graduate CE, eleven years' construction of buildings and installation of equipment on power and industrial plants. Can take full charge. PW-565, Engineering News-Record, 1600 Arch St., Phila., Pa.

ENGINEER executive, technical graduate. Experienced construction, maintenance, valuation, highways, railways, contracting drainage, buildings, mining, estimating and purchasing materials. All around practical man. Consider any position with future. PW-584, Engineering News-Record, 1600 Arch St., Phila., Pa.

FIELD engineer with fifteen years' experience in municipal, subdivision, railway and topographical work seeks permanent connection. Used to taking c. arge in the field, best references. PW-534, Engineering News-Record, 1600 Arch St., Phila., Pa.

FOREIGN work wanted by college man, 26, and single. Three years' experience in railroad construction and maintenance. Particulars on request. Write PW-510, Engineering News-Record, 7 So. Dearborn St., Chicago, Ill.

GRADUATE engineer, experienced in analyzing railroad operating and construction costs, desires position with an engineering or contracting firm as cost engineer or analyst. Highest references. PW-583, Engineering News-Record, 1600 Arch St., Phila., Pa.

HIGHWAY engineer, graduate, six years' experience, desires position as resident engineer. Salary $200. Available on two weeks' notice. PW-486, Engineering News-Record, 1600 Arch St., Phila., Pa.

ITALIAN foreman, who can furnish laborers and get results. Best references. Will go anywhere. PW-593, Engineering News-Record, Tenth Ave. at 36th St., New York.

OFFICE and outside man, can layout work in field and take quantities off plans; three years' college engineering education; age 23; available immediately; desires connection with architect or builder. PW-463, Engineering News-Record, Tenth Ave. at 36th St., New York.

TECHNICAL graduate engineer, age 30, broad experience, desires position as chief valuation or designing engineer of industrial or public utility property. PW-514 Engineering News-Record, Star Bldg., St. Louis, Mo.

WANTED—Position as road machinery mechanic, can repair and run practically all kinds of road machinery. Rex pavers, Ord, Lakewood finishers, ditching machines, Fordson tractors and autos, and can handle men at practically all kinds of road work, except macadam. Can give best of references. PW-573, Engineering News-Record, Guardian Bldg., Cleveland, Ohio.

YOUNG engineer 23 years' technical training, 6 years' experience on transmission line, highways, sewers, concrete, location surveys, plans, estimates, reports desires permanent connection with future in field or office. Now employed in temporary position. PW-575, Engineering News-Record, Tenth Ave. at 36th St., New York.

SALESMEN WANTED

Sales Engineer

With building products concern, handling reinforcing steel, and allied materials. Opportunity with growing concern. New York district. SW-574, Engineering News-Record, Tenth Ave. at 36th St., New York.

SALES ENGINEERS

Calling on Contractors, Power Plants, etc., to sell a fuel and oil saver that also increases capacity, by far the best, big men can earn big money on commission basis.
AS-295, Engineering News-Record
Star Bldg., St. Louis, Mo.

(Continued from preceding page)

PATENT ATTORNEY

PATENTS—Send for form "Evidence of Conception" to be signed and witnessed. Form fee schedule, information, free. Lancaster and Allwine, 272 Ouray Bldg., Washington, D. C.

BUSINESS OPPORTUNITIES

Inventions Commercialized

On cash or royalty basis. Patented or unpatented. In business twenty-four years. Complete facilities. Reference. Write Adam Fisher Mfg. Co., 529 Enright, St. Louis, Mo.

Structural Steel Fabricating Plant

(Annual Business $225,000)

Purchase Price, $75,000

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8x 8 length to 30-ft. 0 in.
6x 8 length to 30-ft. 0-in.
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Repairing

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LOCOMOTIVES

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1—American 2-8-2, standard gauge; 20x28 cyls.; built 1919; weight of engine 95 tons; weight of tender 45½ tons; oil burning; superheater; 35,000 lbs. T.F.; HHRR No. 4; minimum bid considered, $14,000.00.

1—Shay 80-ton special, 101 tons; standard gauge; built 1921; oil burning; superheater; 35,000 lbs. T. F.; HHRR No. 6; minimum bid considered, $14,000.00.

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WANTED

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All Equipment in Exceedingly Good Condition.

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3—Buckets, concrete, dump, 48 C. F., Controllable type.
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1—Hoisting Engine, air or steam, 2 drum, Clyde, 8¼x10 cyl., 14x28 drums.
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2—Tractors, "Best 60," 10 ton.
13—Wagons, Dump Bottom, "Watson," 3-yd. Blasting machines, push cars, chuting equip., bin gates, sheaves all sizes, I-R Jackhammers, "Little David" wood borers, electric and air driven riveting hammers, electric motors centrifugal and diaphragm pumps, rock skips, dump body wagons, etc.

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1—20-ton American Hoist, 45-ft. boom, D.D., A.S.M.E. Boiler.
1—22½-ton O. & S. 50-ft. boom, D.D., A.S.M.E., with generator and magnet.
1—30-ton O & S, 50-75-ft. boom, D.D., Ohio and Mass. Boiler.

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LOCOMOTIVES

1—16x24-in. American std. gauge 4-wheel Saddle Tank. New A.S.M.E. boiler.
1—17x24-in. Vulcan Std., Ga., 6-wheel Saddle Tank A.S.M.E. 60 ton.
3—19x26-in. American std. gauge, 6-wheel switchers, independent tender.
3—20x26 American std. ga., 6 wheel switchers, 72 tons.
2—20x26-in. American std. gauge, superheated, 6-wheel Switcher. Separate tender.

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WE WILL RENT FOR ANY TERM FROM ONE WEEK UP

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5—110-ft. Sullivan, Portable, Gasoline.
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1—1198-ft. Ingersoll, Belt.
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1—150-ft. Westinghouse, Steam.
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All sizes and weights.

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1—35-ton McMyler.
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1—25-ton McMyler.

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1—3½ Keystone, 32-ft. derrick, 4-cyl. gasoline engine. 4—Tripod Drills.

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3—Bucket Operating Stiff Leg Derricks, with 14x14—60-ft. boom.
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2—15-hp. S.D. Lidgerwoods.
2—15-hp. D.D. Lidgerwoods.
1—15-hp. D.D. Mead-Morrison.
1—50-hp. D.D. Lidgerwood.

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1—5-hp. Car Puller.
1—20-hp. D.D. Mead-Morrison.
1—40-hp. D.D. Lidgerwood.
2—50-hp. D.D. Lidgerwood.
2—75-hp. D.D. Lidgerwood.
1—75-hp. S.D. Lidgerwood.

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1—7x10 D. D. Lidgerwood.
1—7x10 D. D. American.
1—8¼x10 D.D. National.
1—8¼x10 D.D. Lidgerwood.
1—8½x12 D.D. Lambert.
1—9x10 D.D. Lidgerwood.
1—8¼x10 3/D Lidgerwood.
1—9x10 3/D Clyde.
1—9x10 3/D Mead-Morrison.

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2—3x7 Mundy.
1—5x6 Lidgerwood.
2—5x6 Carlin.
1—6¼x8 Lidgerwood.
2—7x8 American.

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1—6-ton Burton Gas. 24-in. gauge.
1—6-ton Plymouth Gas. 36-in. gauge.
2—9x14 Porters, 36-in. gauge.
2—10x16 Porters, 36-in. gauge.
1—16x24 Porters std. gauge.

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All sizes up to 2-yd. Gas, Steam and Electric.

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1—14-E Foote, traction wheel, chute, steam.

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1—No. 6 McKiernan-Terry.
1—No. 7 McKiernan-Terry.
1—No. 9-B McKiernan-Terry.
1—No. 5 Union.
1—No. 0 Union.

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1—6-ton Monarch.
1—10-ton Monarch, with scarfier.
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1—10-ton Buffalo-Springfield, with scarifier.
1—12-ton Buffalo-Pitts.
1—14-ton Buffalo-Pitts.

STEAM SHOVELS

2—¾-yd. Type B Erie Caterpillar Combination Machines.
1—14-B Bucyrus, caterpillar.
1—Marion 36, caterpillar.

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Ingersoll-Rand FR-1, 386 cu. ft. capacity with air receiver.

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Chicago Pneumatic NSB straight line, 160 cu. ft. capacity with receiver.

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10—823 HP. Babcock & Wilcox Stirling Water Tube Boilers, Class M-30, 200 lbs. pressure. Westinghouse Stokers, forced draft fans, Vulcan soot blowers and all accessories. Used less than three months.
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1—300 HP. Vogt Water Tube Boiler, 125 lbs. pressure.
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Nashville Industrial Corporation

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1—No. 4 Keystone Grader used on one job for 7 months only. First class condition throughout and complete with skimmer, scoop and trench bucket. Located near New York. Will sacrifice at $1,690, for immediate cash sale.

FS-559, Engineering News-Record
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Immediate Shipment
Quick to Move—Attractive Prices
Also New and Relaying Rails—Portable Track

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FOR SALE or RENT

We Guarantee to be in First-Class Condition All Equipment Overhauled in Our Shop!

STEAM SHOVELS

1—70-C Bucyrus. Shop No. 1749. Standard gauge, railroad, 2½-yd. dipper.
1—Model 60 Marion. Shop No. 1463 Standard Gauge, railroad 2½-yd. dipper (Butt strap boiler).
1—18-B Bucyrus, revolving. Shop No. 1764, traction wheels, ⅞-yd. dipper
1—Model 212 Marion, revolving. Shop No. 4620, New Sept. 1923, mounted on trucks 55-ft. boom, 34-ft. dipper stick, 1¾-yd. dipper.
1—Model 28 Marion, Standard Revolving, Shop No. 2804, traction wheels, ⅝-yd. dipper.
1—Osgood Steam Shovel Dipper, ¾ yd. Real bargain! $250 f.o.b. Aurora, Ill.

FOR RENT—SPECIALS

1—20B Bucyrus, revolving, highlift Steam Shovel. Shop No. 4252. Caterpillar, ¾-yd. dipper. Practically new!
1—Model 29 Osgood Standard Revolving Steam Shovel. Shop No. 1117. Caterpillars, 1-yd. dipper.
14—12-yd. Western Air Side Dump cars, vertical cylinders, standard gauge, practically new.

LOCOMOTIVES

4—7-ton Plymouth, gasoline, 36-in. gauge (cab and canopy, steel enclosed).

SIDE DUMP CARS

18—12-yd. Western Hand Dump, standard gauge, factory overhauled.

SPREADER CAR

1—Factory-rebuilt, all-steel Jordan spreader-car. 100,000 pounds capacity. Shop No. 260. Standard gauge.

DRAGLINES

1—Class 24 Bucyrus, steam operated, skids and rollers, 100-ft. boom, 3½-yd. bucket.
1—Class 24 Bucyrus, Electric Driven, Skids and Rollers, 100-foot Boom, 3½-yd. Bucket.

CYCLONE WELL DRILLS

2—No. 14 Junior Gasoline Traction big blast-hole drills. 5-inch bits.

The above list is constantly changing. No matter what your machinery requirements are, write us—we may have it.

EARTH & ROCK EQUIPMENT CO., *Tel. Randolph 2580* **29 So. La Salle St., Chicago, Ill.**

FOR SALE OR RENT

All equipment overhauled in our Shop is furnished in guaranteed condition, subject to thirty days' trial in service.

STEAM SHOVELS—RAILROAD TYPE

(Note—All Railroad Type Steam Shovels can be furnished on full caterpillar mountings if desired.)

1—95-C Bucyrus Shovel, Shop No. 1235, 5-yd. dipper.
1—Model 75 Marion, Shop No. 2112, 3½-yd. dipper.
1—70-C Bucyrus, Shop No. 1197, 2½-yd. dipper.
4—70-ton Bucyrus, Shop Nos. 920, 939, 977 and 1233, 2½-yd. dippers.
4—Model 60 Marion, Shop Nos. 1301, 1995, 1999 and 2238, 2½-yd. dippers.
2—60-C Bucyrus, Shop Nos. 1286 and 1388, 2½-yd. dippers.
1—45-C Bucyrus, Shop No. 1202, 1¾-yd. dipper.

SHOVELS—FULL REVOLVING

1—175-B Bucyrus—New, 1924. Standard mounting, 75-ft. boom, 3½-yard dipper. Weight, 215-tons. Used eight months.
1—Model 21 Marion, Shop No. 4292, std. boom and dipper arm, ¾-yd. dipper. Steel caterpillars.
1—18-B Bucyrus, Shop No. 1870, ⅞-yd. dipper. Traction.

SIDE DUMP CARS

11—12-yd. Western air dump cars, wood beds, box girder doors.
4—12-yd. Western hand dump cars, wood beds, box girder doors.
10—6-yd. K. & J. Steel Sills Truss-rod doors. Located Burmaugh, Ky.
4—6-yd. Western std. gauge, wood sills. Truss rod doors, automatic couplers.
2—6-yd. Western Std. Gauge Steel Sills. New wood beds, truss-rod doors.
13—6-yd. Continental, std. gauge. Steel sills, truss-rod door, link and pin couplers.
24—5-yard Western, 36-in. Gauge. Heavy Duty, Box Girder Doors. New 1925.
1—4-yd. Western 36-in. gauge, steel sills, truss-rod doors.
11—2-yd. Western, 36-in. gauge, wood beam.
25—1½-yd. Western, 24-in. gauge.

STEAM SHOVEL PARTS

All repair parts on hand for Model 60 Marion and standard 70-ton Bucyrus Steam Shovels.

1—2½-yd. Marion Dipper.
1—Std. boom, dipper arm and ¾-yd. dipper for Type "B" Erie.
1—32-ft. Erie Crane Boom, drum, etc. for converting Type "B" Erie Shovel into bucket-operating crane.
1—Boom for Marion 60 or 61 Shovel, length 35 ft., 22-ft. dipper arm, 1¾-yd. dipper, long jack arms, etc.
1—22-ft. dipper stick for Type "B" Erie.

LOCOMOTIVES—STANDARD GAUGE

1—12x18 American saddle tank, Shop No. 47106. Weight 29 tons.
1—18x24 American Six-wheeled Switcher. Shop No. 47,677, weight 52 tons, 180-lb. steam pressure, Westinghouse straight and automatic air brakes.
1—17x24 Davenport 6-wheel switcher with tender. Shop No. 1268. Steam pressure 180 lbs. Weight 47 tons.
1—16x24 Baldwin Six-wheeled Switcher (Shop No. 44,887). Weight 43½ tons, steam pressure 180 lbs., Westinghouse straight and automatic air brakes, simple and cross-compound air pumps.
1—14x20 Vulcan 4-wheeled Saddle Tank. Shop No. 1893, steam brakes, 180 lb. steam pressure.
1—11x16 New Davenport 4-wheeled Saddle Tank, Steam Brakes. Weight 21 tons.

LOCOMOTIVES—36-IN. GAUGE

2—7x12 Davenport, 4-wheel Saddle Tank. Shop Nos. 1566 and 1567.
1—10x16 Porter four-wheeled saddle tank, Shop No. 3786, weight 18 tons, steam brakes, 160 lb. steam pressure.
1—10x16 Davenport, four-wheeled Saddle Tank, Shop No. 1297, weight 10 tons. Butt-strapped boiler. 160 steam pressure.
2—11x16 Davenport, four-wheeled Saddle Tank. Shop Nos. 2024 and 2025—New 1925. Weight 21½ tons. A.S.M.E. boilers. 170-lb. steam pressure. Steam brakes.

LOCOMOTIVES—24-IN. GAUGE

3—7x12 Davenport Dinkies. Shop Nos. 1202, 1411 and 1524. Weight 9 tons.
1—6x10 Davenport Side Tank Dinkey. Shop No. 1307. Weight, 7 tons. Shop No. 2345.
1—7x12 Vulcan Saddle Tank. Weight 9 tons.

DRAGLINE EXCAVATORS

1—Class 24 Bucyrus, Shop No. 903, skids and rollers, 115-ft. boom, 3½-yard Page bucket.
1—Class 24 Bucyrus. Shop No. 859. Steam self-propelling trucks, 100-ft. boom, 3½-yd. Page bucket, electric lights, coal hoist. Located near East St. Louis.
1—Monighan No. 2, Shop No. 739. Skids 60-ft. boom, 2-yd. bucket.
1—Model 1½-T Monighan, Walker type. New 1923. 60-ft. boom, 2-yd. bucket, 75-hp. Fairbanks-Morse Oil Engine.
1—Model 210 P&H Gasoline Dragline. Shop No. 1077 Armored caterpillars, 40-ft. boom, 1-yd. Page bucket.
1—Complete Caterpillar arrangement for Class 14 Bucyrus Dragline equipped with armored tread.

SPREADER CARS

1—Jordan All-Steel, 100,000 lb., capacity Spreader Car. Shop No. 257.
2—Std. Gauge Western Spreader Car.
1—36-in., Gauge Western Spreader Car.

CRANES

1—Model 102 Northwest Gasoline. Shop No. 102, 30-ft. boom. Bucket-operating.
1—10-ton Industrial, 4-wheel. Shop No. 1989. 40-ft. boom, bucket operating.
1—23-ton Type "B" McMyler 8-wheeled crane, Shop No. 3265, 50-ft. boom, bucket-operating drum, A. S. M. E. boiler.
1—20-ton Brown Hoist 8-wheeled crane, Shop No. 6583, 50-ft. boom, bucket-operating drums.
1—Gantry Crane. New in 1919; 48-ft. boom, 15-ton cap., at 18-ft. radius; 7-ft. 10½-in. gauge, 12-ft. wheelbase, self-propelling. Base of boom 17-ft. above track. Bucket-operating drums. Weight, 50 tons.

BUCKETS

1—¾-yd. Lakewood Clam Shell.
1—Mead-Morrison 1½-yd. Clam Shells.
2—1¼-yd. O. & S. Coal Loading Clam Shells.

MISCELLANEOUS

1—No. 7-S Knickerbocker Concrete Mixer, with power loader and water tank on trucks. New.
1—10-ton 3-wheel Buffalo-Springfield Road Roller.
1—10-ton Austin Gasoline Road Roller.
1—10-ton Monarch Steam Road Roller.
1—American Railroad Ditcher No. 459.
1—8-ft. Austin Giant Road Grader.
1—6½x10 D.C., D.D. American Hoist, with butt strapped boiler.
1—7x10 D.C., D.D. Lambert Hoist, without boiler.
2—Sullivan "WK-31" Portable Air Compressors, 170 cu.ft. per minute. Gas driven.
16—No. 8 Milburn Carbide Lights, 8,000 Candle Power.
4—No. 12 Milburn Carbide Lights, 12,000 Candle Power.
9—Milburn Reliance Carbide Lights
6—Milburn Builders Carbide Lights, 500 Candle Power.
1—No. 55 Buhl Portable Air Compressor.
1—No. 6 McKiernan-Terry Sheeting Hammer.
1—Set Pile Driver Leads.
12—New Drag Scoops.
1—Model 10 Keystone Mixer, low charger, 6 Hp. Novo Gas Engine.
1—No. 6 Keystone Mixer, 3 Hp. Novo Engine.

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1—**P. & H.** Model 206, gasoline, shovel and crane, new 1925. **All Steel Caterpillar,** ¾-yd. shovel; also 38-ft. crane boom; like new.

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Browning 4-wheel, electric, 50-ft. boom.

Brown Hoist 4-wheel, gasoline, 40-ft. boom.

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1—7x10 **Am.** D C. 3-D **Hoisting Engine**
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2—Chicago-Pneumatic O.C.B. 20x12x14, capacity 1,170 cu.ft., with slip ring A.C. 200 hp. motors.
1—2-stage, 950 ft. Sullivan, Class N.B. Compressor.
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1—Sullivan 10x12 class W. G. 3, belt driven. Cap. 200 cu.ft.

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105—Concrete Mixers, sizes 56-S, cap. 2 yd.; 28-S, cap. 1 yd.; 21-S, cap. ¾ yd. With steam or electric power with side loaders or batch hoppers. Following makes: Marsh-Capron, Koehring, Milwaukee, Ransome, Smith, Smith-Chicago, Rex, Lakewood, Foote, Cube or Oshkosh.
26—7-S cap. 1 bag, with low charging platforms, with gasoline engines.

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2—2 yd. Bottom Dump Concrete Buckets.
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11—3 and 5 ton, Street Bros. (Howson) cableways, complete with automatic dump buckets.

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6—Terry steel guy derricks, 115 ft. mast, 100 ft. boom, 20 ft. bull wheel, capacity 15 tons with boom flat. Two bucket operating.

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1—7½-ton capacity Derrick Car, 9x10 Lidgerwood propelling engine, 7x10 Lidgerwood hoisting engine, 1 No. 4½ S Dake swinging engine, 40-hp. locomotive type boiler, 45-ft. lattice steel boom—all mounted on 100,000 lb. capacity M.C.B. flat car.

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A number of practically new American Stiff Leg Derricks mast 14x14x40 ft., boom 14x14x50, 60 or 70 ft., legs 14x14x54 ft., 12 ft. steel bull wheel; capacity 5 to 8 tons.
A quantity of practically new American Stiff Leg Derricks, mast 16x16x40 ft., boom 14x14x80 ft., with truss rods, legs 14x14x60 ft., with 16 ft. steel bull wheel; capacity 8 to 12 tons.
Above derricks can be furnished for hook work or bucket operation.

SPECIFICATIONS OF HOISTS

Large quantity American double drum Hoists, with attached swinger gear, capacity 6,000 lbs. on a single line at 162 ft. per minute, with new 55 hp. Climax 4 cyl. gasoline engine.
Large quantity, same capacity as above, with 37 hp. A.C., 60 cycle, 3 phase, 220 or 440 volt motor, or with 35 hp., 220 volt direct current motor.
Can furnish above Hoists without power for belt drive.

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2—No. 14 Jr. Cyclone with gasoline engine, complete with fittings.
14—Model 31, Waugh "Denver" column drills.
1—D.W.64, Sullivan column drill.
1—Sullivan tripod drill.
2—Ingersoll-Rand tripod drills.

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1—American standard gauge, 40-ton, saddle tank, cylinders 14x22, shop No. 57004.
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2—Porter, 10x16, 18-ton, 36-in. gauge, shop Nos. 4619 and 4667.

CRANES AND SHOVELS

4—Locomotve Cranes, 8-wheel, MCB trucks. One 25-ton Industrial with 40-ft. boom; one 25-ton American with 50-ft. boom; one 15-ton Link-Belt with 50-ft. boom; one 15-ton O & S with 40-ft. boom.
1—O. & S. 7-ton Crane, 30 ft. boom, ⅜ yd. clamshell bucket, traction wheels.
2—Thews on traction wheels, 1—Type A1, 1—Type 0.
2—Type B Erie Combination Shovels, Cranes 1—on caterpillars, 1—on traction wheels.
2—Marion, model 21, on cats; one with 20 ft. boom, 15 ft. stick; one with 17 ft. 6 in. boom and 12 ft. 6 in. stick. Shop Nos. 5047, 4916.

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1—American 9x10, double cylinder, double drum space for boiler, no boiler.
3—Mead-Morrison 9x10, double cylinder, double drum, space for boiler, no boilers.

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(4)

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CATERPILLAR

Northwests, 104 and 105, Standard booms and dipper sticks, ¾-yd. and 1-yd. dippers.

Marion 37, boom 36 ft., dipper stick 26 ft., dipper 1¼ yd., electric lighting plant.

Type B Erie, standard and high lift, ¾-yd. dipper.

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1—25-ton Browning, 8 wheel, 50-ft. boom.
1—20-ton Brown Hoist, 8 wheel, 50-ft. boom.
1—20-ton Ohio, 8 wheel, 50-ft. boom.
1—12-ton Osgood, 8 wheel, 40-ft. boom.
2— 8-ton Osgood, 4 wheel, 40-ft. boom.
1—Northwest Caterpillar, gas, 40-ft. boom.

STEAM SHOVELS
(Caterpillar)

1—Erie ¾-yard, high lift.
1—Thew ¾-yard, high lift.
1—Marion ¾ yard, high lift.
1—Osgood ¾ yard, high lift.
1—Marion 37, 1¾ yard.
1—Bucyrus 80 B, 2 yard.
1—50 B, 1¾ yard, with dragline equipment.

DRAGLINES

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1—Bucyrus 9½ (caterpillar.)

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1—13x18 American, 4 wheel Saddle Tank
1—12x16 Vulcan, 4 wheel Saddle Tank.
1—11x16 Vulcan, 4 wheel Saddle Tank.

(36-in. gauge)	(24-in. gauge)
2—11x16 Vulcan.	1—7x12 Vulcan
2— 9x14 Vulcan.	
1— 6x10 Vulcan.	

(Gasoline)

1—7-ton Plymouth 4-ft.8½-in. gauge.
2—8-ton, 36-in. Gauge, Whitcomb.
2—6-ton Whitcomb, 24-in. gauge.

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40—Western 4-yard, heavy duty.
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2—25-ton 8-wheel standard gauge Brownhoists, 50-ft. booms bucket handling.
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1—4-wheel standard gauge, 15-ton Brownhoist. Will rebuild, length boom, etc., suit customer.
1—Type "B" 20-ton McMyler, Standard Gauge, 8-wheel 50-ft. boom, bucket handling. Shop No. Bc1305.

SHOVELS

1—Type "B" Erie, Steam, Caterpillar Traction. High lift, 22-ft. 6-in. boom, 18-ft. stick. Shop No. 1897.
2—½-yd. No. 1 Brownhoist gas shovels, Caterpillar Traction.

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1—Austin No. 0.

1—Austin No. 00, gasoline driven, digs 10 ft. deep, 30 in. wide.

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No. 105 P & H Trencher, prac. new

2—15 Ton Loco. Cranes and Others

2—3½ yd. Shovels (Caterpillar)

Crushers—Boilers—Hoists Etc.

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"00" Austin and 28 ft. capacity Parsons. Both complete and in splendid operating condition.

Obliged to move these machines immediately, and first offer of $1,500.00 will get either of them.

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1—210-ft. Chicago-Pneu. P2-DGL gasoline.
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1—534-ft. Chicago-Pneu. NSBE with motor.
1—877-ft. Ing.-Rand RB with motor.
1—1302-ft. Ing.-Rand PRE-2 dir. con. 2200-60-2 or 3.
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75-hp. Ldg. SD shaft hoist with motor.
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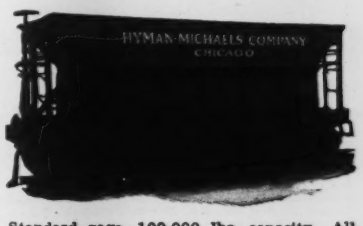

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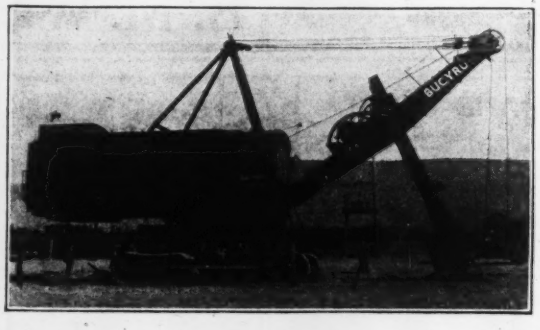

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Railroad Type Shovels, all sizes.

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Haiss Mfg. Co., Geo.
Lidgerwood Mfg. Co.
Link-Belt Co.
Mead-Morrison Mfg. Co.
Wellman, Seaver Morgan Co.

Coal Storage Systems
Brown Hoisting Machy. Co.
Haiss Mfg. Co., Geo.
Lidgerwood Mfg. Co.
Link-Belt Co.
Mead-Morrison Mfg. Co.

Cofferdams, Steel
Bethlehem Steel Co.

Column Clamps
Universal Form Clamp Co.

Column, Forms
Blaw-Knox Co.
Heltzel Steel Form & Ir. Co.
Kalman Steel Co.

Column, Wrapping
Kalman Steel Co.
National Steel Fabric Co.
Ryerson & Son, Inc.,

Compositions, Anti-Corrosive
Wailes Dove-Hermiston

Compressors, Air, Heavy Duty
Allis-Chalmers Mfg. Co.
Buhl Company
Curtis Pneum. Mchy. Co.
Ingersoll Rand Co.
McKiernan-Terry Drill Co.
Sullivan Machinery Co.
Worthington Pump & Mchy. Corp.

Compressors, Air, Portable
Buhl Company
Cement-Gun Co.
Ingersoll Rand Co.
Schramm, Inc.
Sullivan Machinery Co.

Concrete Breaking
Chicago Concrete Breaking Co.

Concrete Floor Hardener
Anti-Hydro Waterproof. Co.
Sonneborn Sons Co.
Truscon Laboratories

Concrete Making Mchy.
Koehring Co.
Lakewood Engr. Co.
Ransome Conc. Mchy. Co.

Concrete Reinforcement
Amer. Steel & Wire Co.
Bethlehem Steel Co.
Brown Hoisting Machy Co.
Carnegie Steel Co.
Concrete Steel Co.
Consolidated Expanded Metal Co.
Kalman Steel Co.
Laclede Steel Co.
National Steel Fabric Co.
North Western Expanded Metal Co.
Ryerson & Son, Joseph T.
Truscon Steel Co.
U. S. Gypsum Co.
Universal Form Clamp Co.

Condensers
Ingersoll Rand Co.
Worthington Pump & Mchy. Corp.

Conduit Benders
Amer. Pipe Bend. Mch. Co.
Atlantic Gulf & Pacific Co.

Contractors
Cement-Gun Constr. Co.
Gunite Conc. & Constr. Co.
MacArthur Conc. Pile & Foundation Co.
Merritt-Chapman & Scott
Post & McCord, Inc.
Raymond Concrete Pile Co.
Spencer, White & Prentis
Terry & Tench Co., Inc.

Contractors, Drilling
Sprague & Henwood, Inc.

Contractor's Tools
Waldo Bros. & Bond Co.

Contractors Well Drilling
Artesian Well & Supply Co.

Conveyors, Belt
Austin Western Rd. Mchy. Co.
Barber-Greene Co.
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Geo.
Link-Belt Co.
Smith Engr. Wks.
Wellman, Seaver Morgan Co.

Conveyors, Bucket
Barber-Greene Co.
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Geo.
Wellman, Seaver Morgan Co.

Corner Bead, Metal
Concrete Steel Co.
Consolidated Expanded Metal Co.
Northwestern Expanded Metal Co.
Truscon Steel Co.

Couplings
Waldo Bros. & Bond Co.

Cranes, Crawling Tractor
Austin Mchy. Corp.
Harnischfeger Corp.
Industrial Works
Koehring Co.
Link-Belt Co.
Marion Steam Shovel Co.
Northwest Engr. Co.
Orton Crane & Shovel Co.
Speeder Mchy. Corp.
Universal Crane Co.

Cranes, Electric
Dayton Whirley Co.
Harnischfeger Corp.
Industrial Works
Marion Steam Shovel Co.
Northwest Engr. Co.
Universal Crane Co.

Cranes, Gasoline
Austin Mchy. Corp.
Harnischfeger Corp.
Koehring Co.
Marion Steam Shovel Co.
Northwest Engr. Co.
Orton Crane & Shovel Co.
Speeder Mchy. Corp.

Cranes, Locomotive
Austin Mchy. Corp.
Bay City Dredge Works
Brown Hoisting Machy Co.
Browning Crane Co., The
Byers Machine Co.
Erie Steam Shovel Co.
Harnischfeger Corp.
Industrial Works
Link-Belt Co.
Marion Steam Shovel Co.
Northwest Engr. Co.
Ohio Locomotive Crane Co.
Orton Crane & Shovel Co.
Osgood Co., The
Thew Shovel Co.
Universal Crane Co.

Cranes, Motor Truck
Browning Crane Co.
Byers Machine Co.
Orton Crane & Shovel Co.
Universal Crane Co.

Cranes, Traveling
Brown Hoisting Machy Co.
Harnischfeger Corp.
Northwest Engr. Co.
Toledo Crane Co.

Cranes, Wrecking
Browning Crane Co., The
Thew Shovel Co.

Crawler Attachments
Haiss Mfg. Co., Geo.

Creosoted Blocks, Timber, Poles, Cross-Arms, Lumber, Etc.
Eppinger & Russell Co.
Jennison-Wright Co.
Southern Wood Preserv. Co
Wyckoff Pipe & Creosot. Co.

Creosoting
American Creosote Wks.
Barrett Co.
Eppinger & Russell Co.
Jennison-Wright Co.
Savannah Creosoting Co.
Wyckoff Pipe & Creosot. Co.

Creosoting Oils
Barrett Co.
Protexol Corp.

Cribbing Units
Federal Cement Tile Co.
R. C. Products Co.

Crushers and Pulverizers
Acme Road Mchy. Co.
Allis-Chalmers Mfg. Co.
Austin Western Rd. Mchy. Co.
Brown Hoisting Mchy. Co
Smith Engr. Wks.
Universal Crusher Co.
Universal Rd. Mchy. Co.

Culverts, Corrugated
American Casting Co.
Austin Western Rd. Mchy. Co.
Canton Culvert & Silo Co.
Hardesty Mfg. Co., The R.

Culverts, Metal
American Cable Co.
American Casting Co.
Amer. Rolling Mill Co.
Amer. Sheet & Tin Plate Co.
Austin Western Rd. Mchy. Co.
Hardesty Mfg. Co., The R.
U. S. Cast Ir. Pipe Fdy. Co.

Culverts, Nestable & Riveted Corrugated
Canton Culvert & Silo Co.

Curbs, Guards, Steel
Godwin Co., Inc., W. S.

Curbs, Steel Protected
Concrete Steel Co.
Truscon Steel Co.

Dams
Ambursen Construction Co.

Dealers, Equipment
(See Searchlight Section)

Derricks and Derrick Fittings
Amer. Terry Derrick Co.
Byers Machine Co.
Dobbie Fdry. & Mach. Co.
Haiss Mfg. Co., Geo.
Hayward Co.
Insley Manufacturing Co
Lambert Hoist. Eng. Co.
Lidgerwood Mfg. Co.
Mundy Sales Corp.

Distributors, Pressure Oil
(See Road Oilers. Pressure)

Ditching Machinery
(See Excavators)

Docks and Harbor Work
Merritt-Chapman-Scott
Raymond Concrete Pile Co
Snare Corp., Fred'k.

Doors & Shutters, Steel Rolling
Peelle Company, The

Drafting Machines
Universal Draft. Mch. Co.

Drafting Room Furniture and Supplies
Dietzgen Co., Eugene
Hamilton Mfg. Co.

Draglines
Austin Mchy. Corp.
Bucyrus Company
Dayton Whirley Co.
Harnischfeger Corp.
Koehring Co.
Marion Steam Shovel Co
Northwest Engr. Co.
Universal Crane Co.
Speeder Mchy Corp.

Drawing Materials
Dietzgen Co., Eugene
Hamilton Mfg. Co.
Keuffel & Esser Co.

Dredges
Bay City Dredge Works
Bucyrus Company
Ellicott Machine Corp.
Hayward Co.
Lambert Hoist. Eng. Co.

How Has Sheet Steel Served You?

Engineers and executives are constantly adapting Sheet Steel to new uses and new products. In doing this, they often gain knowledge which is of far-reaching value and economy to them as well as the public. One of the purposes of the Sheet Steel Trade Extension Campaign is to gather and disseminate knowledge of this character. The Committee is therefore anxious to receive essential data regarding the application of Sheet Steel under circumstances and methods which are new and unusual, and where the practical value of such application has been demonstrated.

Where special work is required to gather this data, we usually arrange for compensation at remunerative rates.

We invite correspondence on any interesting developments as to how Sheet Steel has served you.

Why Sheet Steel Shelving effects such great economy in the storage of material

There are three points that should be carefully considered in making shelving installations:

(1) Racks should be compared from the standpoint of their storage capacity.

(2) The value of the floor space required for each installation should be carefully estimated.

(3) Allowance should be made in reduction of inventory possible through better stock control.

Perhaps the actual experience of an executive will illustrate. This man had built his own shelving. He had plenty of material and labor—apparently the cost was 20 per cent less than the steel, *figuring rack for rack.* Then he outgrew his building. He had to have more space.

An investigation proved that one rack of steel shelving would replace two of the old. The steel was adjustable and put every inch of space to work.

This saving for his storage space solved his building problem so the executive installed steel.

When the installation was complete a check-up of cost proved that while the new equipment, rack for rack, cost 20 per cent more, figured in storage capacity, the saving was 60 per cent.

What is more—the flexibility of the new installation permitted much better stock arrangement. Every item had its own compartment in its logical place. This permitted a closer check on stocks, which in turn, made it possible to reduce the quantities carried. The result was the reduction in stock inventory almost offset the cost of the equipment. What is more—expensive shortages and confusion through loss of material, was avoided.

The economies effected in stockrooms are typical of savings that can be made in railway operation—from wheelbarrows to office furniture, from steel lockers to complete buildings; wherever durability, permanent beauty and fire resistance are needed, it pays to use Sheet Steel.

MASTER TEC BRAND

This trade mark stenciled on galvanized Sheet Steel is definite insurance to the buyer that every sheet so branded is of prime quality — full weight for the gauge stamped on the sheet—never less than 28 gauge—and that the galvaniz ing is of the full weight and quality established by the Sheet Steel Trade Extension Committee specification.

SHEET STEEL
TRADE EXTENSION COMMITTEE
OLIVER BUILDING
PITTSBURGH PENNSYLVANIA

Lidgerwood Mfg. Co.
Marion Steam Shovel Co.
Osgood Co., The

Dredges, Dipper
Austin Mchy. Corp.
Bucyrus Company
Ellicott Machine Corp.
Osgood Co., The

Dredges, Hydraulic
Atlantic Gulf & Pacific Co.
Bucyrus Company
Ellicott Machine Corp.
Marion Steam Shovel Co.
Morris Machine Works

Drills, Blast Holes
Sanderson-Cyclone Drill Co.

Drills, Core
Giles Drilling Co.
Ingersoll Rand Co.
McKiernan-Terry Drill Co.
Morris Machine Works
Osborne Drilling Co.
Sprague & Henwood, Inc.
Sullivan Machinery Co.

Drills, Rock
Cleveland Rock Drill Co.
Independent Pneu. Tool Co.
Ingersoll Rand Co.
McKiernan-Terry Drill Co.
Sullivan Machinery Co.

Drums, Counterweight
Hayward Co., The

Drums, Holding
Blaw-Knox Co.
Haiss Mfg. Co., Geo.
Hayward Co.
Monighan Machine Co.

Dryers
Blaw-Knox Co.
Vulcan Iron Wks. of Pa.

Dynamite
Hercules Powder Co.

Elevators, Bucket
Austin Western Rd. Mchy. Co.
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Geo.
Hendrick Mfg. Co.
Link-Belt Co.
Ohio Locomotive Crane Co.
Smith Engr. Wks.

Elevators, Contractors' Material
Austin Western Rd. Mchy. Co.
Barber-Greene Co.
Byers Machine Co.
Haiss Mfg. Co., Geo.
Insley Manufacturing Co.
Jeffrey Mfg. Co.
Ransome Conc. Mchy. Co.
Smith Co., T. L.
Smith Engr. Wks.

Elevators Dragline
Northwest Eng'r'g Co.

Engineers
(See also Directory of Engineers)
Atlantic Gulf & Pacific Co.
MacArthur Conc. Pile & Foundation Co.
Merritt-Chapman-Scott Post & McCord, Inc.
Raymond Concrete Pile Co.
Spencer, White & Prentis
Terry & Tench Co., Inc.
Wellman, Seaver Morgan Co.

Engineers and Draftsmen's Instruments and Supplies
Beckmann Co., L.
Chesterman & Co., Ltd.
Dietzgen Co., Eugene
Gurley, W. & L. E.
Hamilton Mfg. Co.
Higgins & Co., C. M.
Keuffel & Esser Co.
Lufkin Rule Co.

Engineers, Roofing
Amer. Cement Tile Mfg. Co.
Federal Cement Tile Co.
U. S. Gypsum Co.

Engines, Gas, Gasoline, Oil
Allis-Chalmers Mfg. Co.
Buda Co.
Climax Engr. Co.
Continental Motors Corp.
Erie Steam Shovel Co.
Ingersoll Rand Co.
Smith Co., T. L.
Worthington Pump & Mchy. Corp.

Engines, High-Duty Water Works
Morris Machine Works

Engines, Hoisting
(See Hoists)

Engines, Portable
Climax Engr. Co.

Engines, Traction
Caterpillar Tractor Co.

Excavators, Cableway
Flory Mfg. Co., S.
Lambert Hoist. Eng. Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Sauerman Bros.

Excavators, Ditch & Trench
Austin Mchy. Corp.
Barber Greene Co.
Bay City Dredge Works.
Buckeye Tr. Ditcher Co.
Byers Machine Co.
Cleveland Tractor Co.
Erie Steam Shovel Co.
Harnischfeger Corp.
Marion Steam Shovel Co.
Moore Trench Mach. Co.
Northwest Engr. Co.
Osgood Co., The
Parsons Co.
Speeder Mchy. Corp.
Thew Shovel Co.

Excavators, Drag-Line
Austin Mchy. Corp.
Bay City Dredge Works
Bucyrus Company
Byers Machine Co.
Dayton Whirley Co.
Erie Steam Shovel Co.
Harnischfeger Corp.
Hayward Co., The
Link-Belt Co.
Marion Steam Shovel Co.
Mead-Morrison Mfg. Co.
Monighan Machine Co.
Northwest Engr. Co.
Orton Crane & Shovel Co.
Osgood Co., The
Sauerman Bros.
Smith Co., T. L.

Expanded Metal
Concrete Steel Co.
Consolidated Expanded Metal Co.
Kalman Steel Co.
Northwestern Expanded Metal Co.
Ryerson & Son, Inc.,
Truscon Steel Co.

Expansion Bolts
National Lead Co.

Explosives
Hercules Powder Co.

Fences & Gates Iron & Wire
American Fence Constr. Co.
Stewart Iron Wks.

Filters, Water, Municipal & Industrial
Amer. Water Softener Co.
Graver Corp.
International Filter Co.
Leopold & Co., F. B.
Norwood Engineering Co.
Roberts Filter Mfg. Co.

Fireproof Material and Construction
Concrete Steel Co.
Consolidated Expanded Metal Co.
Kalman Steel Co.
National Steel Fabric Co.
Northwestern Expanded Metal Co.
Peelle Company, The
Robertson Co., H. H.
Truscon Steel Co.

Floor Hardener, Concrete
(See Concrete Floor Hardener)

Floors, Asphalt Blocks
Hastings Pavement Co.
Standard Oil of N. Y.

Floors, Asphalt Mastic
Standard Oil Co. of N. Y.

Flooring, Fireproof
Hendrick Mfg. Co.
Irving Iron Works Co.
Kerlow Steel Flooring Co.
National Steel Fabric Co.
Universal Safety Tread Co.

Floor, Wood Block
Barrett Co.
Jennison-Wright Co.
Southern Wood Preserv. Co.

Flumes, Iron and Steel
Amer. Rolling Mill Co.
Blaw-Knox Co.
Hardesty Mfg. Co., The R.

Forgings
Bethlehem Steel Co.

Form Clamps
Insley Manufacturing Co.
Universal Form Clamp Co.

Form Tighteners
Marion Malleable Iron Wks.

Forms—Culvert, Road, Sewer, Tunnel, Etc.
Blaw-Knox Co.
Foote Co., Inc.
Heltzel Steel Form & Ir. Co.
Lakewood Engr. Co.
Metals Form Corp.

Forms, Curb and Gutter
Blaw-Knox Co.
Heltzel Steel Form & Ir. Co.
Marsh Capron Co.
Metals Form Corp.

Forms for Walls, Building Construction, Etc.
Blaw-Knox Co.
Heltzel Steel Form & Ir. Co.
Marsh Capron Co.
Metals Form Corp.

Foundations
Foundation Co., The
MacArthur Conc. Pile & Foundation Co.
Merritt-Chapman-Scott Post & McCord, Inc.
Raymond Concrete Pile Co.
Simplex Conc. Pile Assn.
Spencer, White & Prentis

Frogs and Switches, Railway
Bethlehem Steel Co.
Ramapo Ajax Corp.
Sweets Steel Co.

Furnaces, Annealing & Tempering
American Bridge Co.

Gas Holders
Chicago Bridge & Iron Wks.

Gas Producers
Blaw-Knox Co.

Gates, Sluice
Coffin Valve Co.
Coldwell Wilcox Co.
Hardesty Mfg. Co., The R.

Gauges, Loss of Head
Simplex Valve & Meter Co.

Gauges, Rate of Flow
Simplex Valve & Meter Co.

Gears
Earle Gear & Mach. Co.
Link-Belt Co.
Vulcan Iron Wks. of Pa.

Gears, Worm Reduction
Earle Gear & Mch. Co.
DeLaval Steam Turbine Co.

Generators, Electric
Allis-Chalmers Mfg. Co.

Glass, Fireproof
(See Wire Glass)

Governors, Waterwheel
Woodward Governor Co.

Graders, Road
Austin Western Rd. Mchy. Co.
Erie Steam Shovel Co.
Good Rds. Mchy. Co.
Hadfield Penfield Steel Co.
Smith Co., T. L.

Granite
Granite Paving Brick Mfgrs. Assn.

Gratings, Safety
Hendrick Mfg. Co.
Irving Iron Works Co.
Kerlow Steel Flooring Co.
Universal Safety Tread Co.

Gravel-Washing Plants
Link-Belt Co.
Sauerman Bros.

Grills
Hendrick Mfg. Co.

Grouting
Weber Engr'g Co.

Gypsum
U. S. Gypsum Co.

Hammers, Pneumatic
Fairbanks, Morse & Co.
Independent Pneu. Tool Co.

Hammers, Steam, Pile
(See Pile Hammers, Steam)

Heaters, Tar & Asphalt
Connery & Company
Kinney Mfg. Co.
Littleford Bros.

Hoists, Concrete, Tower
Insley Manufacturing Co.
Lakewood Engr. Co.
Lambert Hoist. Eng. Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
National Hoisting Eng. Co.
Ransome Conc. Mchy. Co.

Hoists, Contractors'—Electric
Allis-Chalmers Mfg. Co.
Bay City Dredge Works
Byers Machine Co.
Dobbie Fdry. & Mach Co.
Flory Mfg. Co., S.
H. & O. Mchy. & Eng. Co.
Lambert Hoist. Eng. Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Monighan Machine Co.
Mundy Sales Corp., The
National Hoisting Eng. Co.
Vulcan Iron Wks. of Pa.

Hoists, Contractors'—Gasoline
Flory Mfg. Co., S.
H. & O. Mchy. & Eng. Co.
Harnischfeger Corp.
Lambert Hoist. Eng. Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Sales Corp., The
National Hoisting Eng. Co.
Vulcan Iron Wks. of Pa.
Willemette Ir., Steel Wks.

Hoists, Contractors' Steam
Allis-Chalmers Mfg. Co.
Byers Machine Co.
Ingersoll-Rand Co.
Lambert Hoist. Eng. Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Sales Corp., The
National Hoisting Eng. Co.
Vulcan Iron Wks. of Pa.

Hoists, Material Tower
Lakewood Engr. Co.

Hoists, Motor
Mead-Morrison Mfg. Co.

Hoists, Pneumatic
Ingersoll-Rand Co.
Sullivan Machinery Co.

Hoists, Skip
Link-Belt Co.
Mead-Morrison Mfg. Co.

Hoppers, Concrete
Insley Mfg. Co.
Lakewood Engr. Co.
Ransome Conc. Mchy. Co.

Hoppers, Steel
Blaw-Knox Co.
Erie Steel Constr. Co.
Heltzel Steel Form & Ir. Co.
Littleford Bros.

Hydrants
Kennedy Valve Mfg. Co.
Ludlow Valve Mfg. Co.
Michigan Valve & Fdy. Co.
Vogt Bros. Mfg. Co.
Waterous Fire Engine Wks.
Wood & Co., R. D.

Hydraulic Giants
American Spiral Pipe Wks.

Inserts, Concrete
Concrete Steel Co.
Kalman Steel Co.
Truscon Steel Co.

Instruments, Drawing
Keuffel & Esser Co.

Instruments, Surveying
Ainsworth & Sons, Wm.
Berger & Sons, C. L.
Brandis & Son
Buff & Buff Mfg. Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Lietz Co., A.

Iron Work, Structural and Ornamental
Irving Iron Works Co.
Snead Architect. Ir. Wks.
Universal Safety Tread Co.

Jacks, Lifting
Duff Mfg. Co.
McKiernan-Terry Drill Co.
Roos Co., H. W.

Jacks, Pipe Forcing
Duff Mfg. Co.

Jacks, Track
Duff Mfg. Co.

Joints, Expansion, Paving
Barrett Co.
Carey Co., Philip

Joints, Filler Paving
Barrett Co.
Standard Oil Co. of N. Y.

Joints, Flexible Pipe
Central Foundry Co.
U. S. Cast Ir. Pipe Fdy. Co.

Kilns, Rotary and Vertical
Vulcan Iron Wks. of Pa.

Ladder Steps, Steel
Hendricks Mfg. Co.
Irving Iron Works Co.

Lath, Expanded Metal
Amer. Rolling Mill Co.
Concrete Steel Co.
Consolidated Expanded Metal Co.
Kalman Steel Co.
National Steel Fabric Co.
Northwestern Expanded Metal Co.
Ryerson & Son, Inc.
Truscon Steel Co.

Leadite
Leadite Co., Inc., The

Lettering Guides
Keuffel & Esser Co.

Lights Contractors
Carbic Manufacturing Co.

Loaders, Car & Wagon
Austin Mchy. Corp.
Austin Western Rd. Mchy. Co.
Barber-Greene Co.
Erie Steam Shovel Co.
Haiss Mfg. Co., Geo.
Link-Belt Co.

Locomotives, Electric
Vulcan Iron Wks. of Pa.

Locomotives, Gasoline
Fate-Root-Heath Co.
Hadfield Penfield Steel Co.
Midwest Loco. Works
Vulcan Iron Wks. of Pa.

Locomotives, Steam
Vulcan Iron Wks. of Pa.

Locomotives, Storage Battery
Vulcan Iron Wks. of Pa.

Lumber
Eppinger & Russell Co.
Industrial Lumber Co.
Southern Pines Sales Corp.

Machinery, Paver
Chain Belt Co.

Manhole Covers
Central Foundry Co.

Manometers
Simplex Valve & Meter Co.

Metal Protective Paint
Eagle Picher Lead Co.

Meters, Boiler Feed Water
Builders Iron Fdy.

Meters, Current
Gurley, W. & L. E.

Meters, Gas and Steam
Builders Iron Fdy.

Meters, Water and Oil
Builders Iron Fdy.
Gamon Meter Co.
Neptune Meter Co.
Simplex Valve & Meter Co.
Union Water Meter Co.
Worthington Pump & Mchy. Corp.

Mixers, Concrete
Austin Mchy. Co.
Cement-Gun Co.
Foote Co., Inc.
Knickerbocker Co.
Koehring Co.
Lakewood Engr. Co.
Marsh Capron Co.
Ransome Conc. Mchy. Co.
Smith Co., T. L.

Mixers, Grout
Austin Mchy. Corp.
Ransome Conc. Mchy. Co.
Smith Co., T. L.
Union Iron Works

Mixers, Hot
Austin Mchy. Corp.

Mixers, Mortar
Austin Mchy. Corp.
Knickerbocker Co.
Marsh Capron Co.
Ransome Conc. Mchy. Co.

Mixers, Paving
Austin Mchy. Corp.
Foote Co., Inc.
Koehring Co.
Ransome Conc. Mchy. Co.
Smith Co., T. L.

Mixers, Pneumatic
Ransome Conc. Mchy. Co.

Motors, Electric
Allis-Chalmers Mfg. Co.

Motors, Gasoline
Buda Co.
Continental Motors Corp.

Motor Trucks
(See Trucks, Motor)

Nitrogen Gas
Linde Air Prod. Co.

Oxy-Acetylene Apparatus
Blaw-Knox Co.

Oxygen Gas
Linde Air Prod. Co.

Packing
Jenkins Bros.

Paints, Graphite
Truscon Laboratories

Paints, Light Reflecting
Truscon Laboratories

Paints, Metal Protective
Barrett Co.
Carey Co., Philip
Eagle Picher Lead Co.
National Lead Co.
Protexol Corp.
Truscon Laboratories
Wailes-Dove-Hermiston

Paints, Waterproofing
Wailes-Dove-Hermiston

Partitions
U. S. Gypsum Co.

Pavement Breakers
Buckeye Tr. Ditcher Co.
Cleveland Rock Drill Co.
Independent Pneu. Tool Co.
Ingersoll-Rand Co.

Paving Asphalt
Carey Co., Philip
Standard Oil Co. of N. Y.

Paving, Asphalt Mastic
Standard Oil Co. of N. Y.

Paving Blocks, Asphalt
Hastings Pavement Co.

Paving Blocks, Granite
Granite Paving Block Mfgrs. Assn.

Paving Bricks
Nat'l Pav. Brick Mfr's Assn.

Paving, Cold Patching
Standard Oil Co. of Ind.
Standard Oil Co. of N. Y.

Paving Guards, Steel
Godwin Co., Inc., W. S.

Paving Materials, Vitrified Brick
Nat'l Pav. Brick Mfr's Assn.

Paving Tools
Littleford Bros.

Penstocks
Blaw-Knox Co.
Connery & Company
Chicago Bridge & Iron Wks.
McNeil & Bro. Co., J.
Penstock Constru. Co.
Petroleum Iron Wks.

Pile-Drivers
Browning Crane Co., The
Harnischfeger Corp.
Industrial Works
McKiernan-Terry Drill Co.
Orton Crane & Shovel Co.
Union Iron Works

Pile Hammers, Steam
Industrial Works
McKiernan-Terry Drill Co.
National Hoisting Eng. Co.
Union Iron Works
Vulcan Iron Wks. (Chic.)

Piles, Concrete
Foundation Co., The
MacArthur Conc. Pile & Foundation Co.
Newark Concrete Pipe Co.
Nichols Centrif. Prod. Corp.
Raymond Concrete Pile Co.
Simplex Conc. Pile Assn.
Spencer, White & Prentis

Piles, Creosoted Wood
Jennison-Wright Co.

Piling, Interlocking Steel
Bethlehem Steel Co.
Carnegie Steel Co.
Sheet Piling, Inc.

Pipe, Bends
East Jersey Pipe Co.

Pipe Benders
Amer. Pipe Bend. Mch. Co.

Pipe, Cast-Iron
Amer. Cast Iron Pipe Co.
Central Foundry Co.
Clow & Sons, James B.
Donaldson Iron Co.
Fox & Co., John
Glamorgan Pipe & Fdry.
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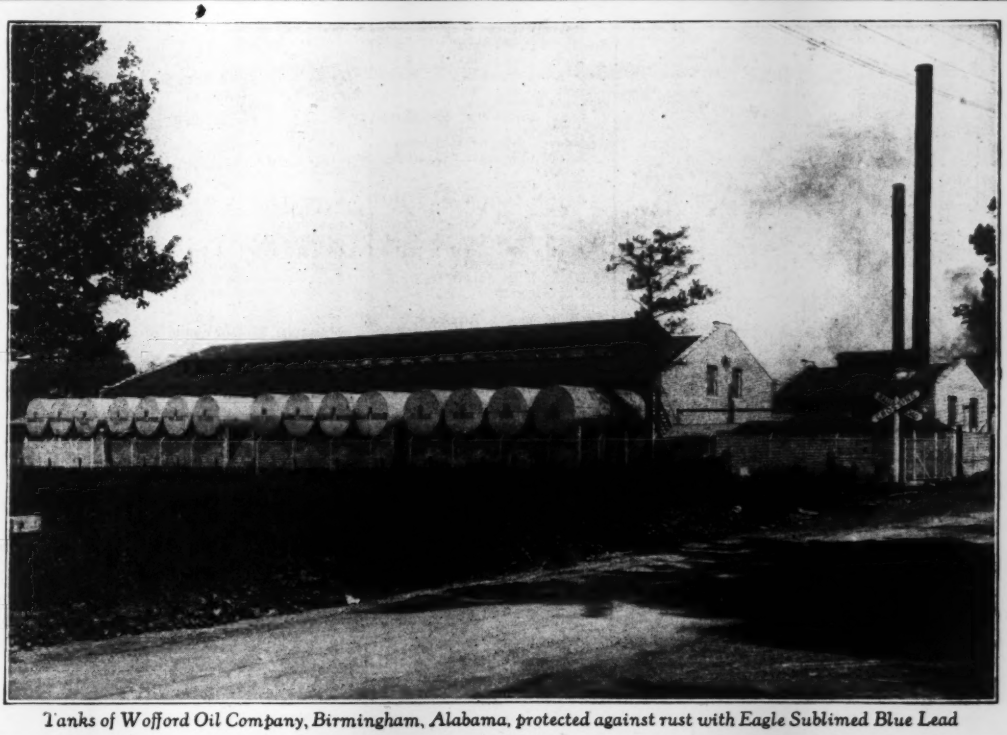

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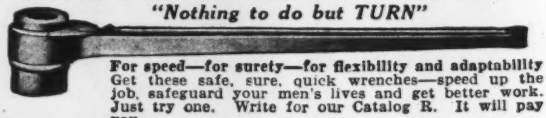

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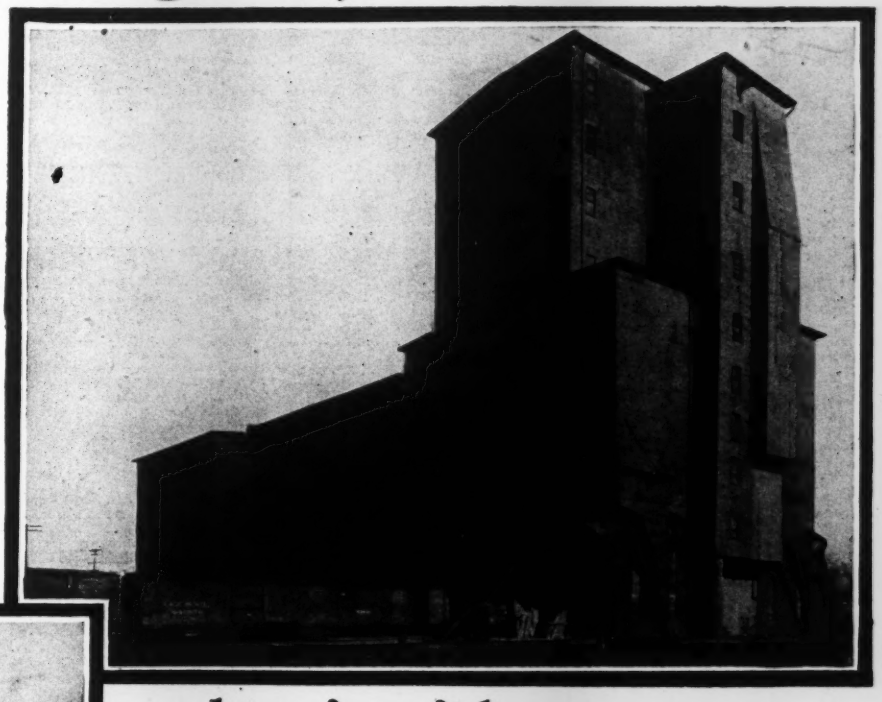

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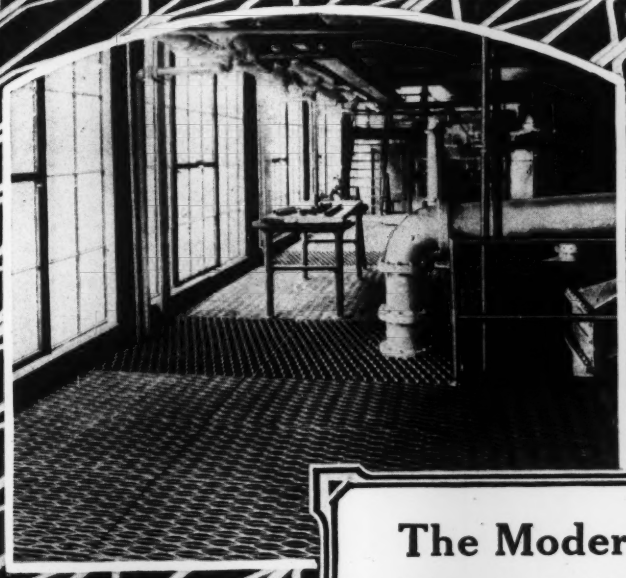

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